Public Works Digest

Volume X, No. 6
July/August 1998

A publication of the U.S. Army Center for Public Works

Celebrating 10 Years

US Army Corps of Engineers®

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US Army Corps of Engineers®

Editorial

Installation Management

USACE Support

Environment

Survey

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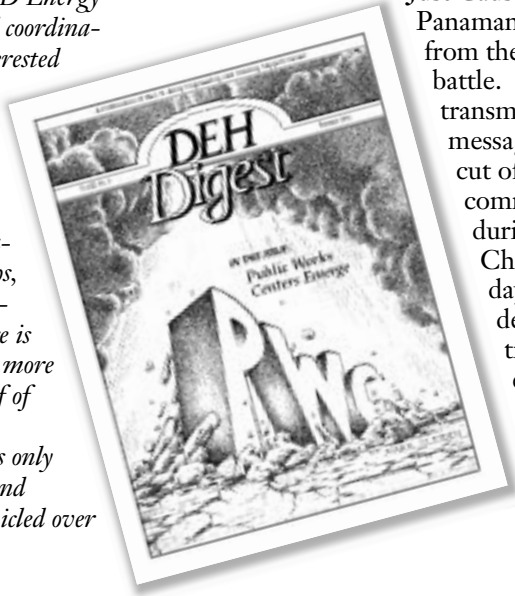
Public Works Digest celebrates 10 Years of service to the Army

Launched in May 1988, the ***DEH Digest*** *was created to provide technical information and innovative ideas on public works business for the Army's DEHs. "Torrie McAllister and I wanted it to be a* ***TIME****-style magazine for the facilities engineering business," said Penny Schmitt, the publication's first editor. Dr. Lewis H. Blakey, the first Director of the US Army Engineering and Housing Support Center (EHSC), introduced the first* ***DEH Digest*** *as the "best source for news on issues in the DEH business."*

That was more than ten years ago, and during that decade, we delivered what we promised. In its first year of publication, the ***Digest*** *won third place in the prestigious Blue Pencil competition sponsored by that National Association for Government Communicators. Better still has been the reward of a constantly growing readership. Over the decade, our readers have come to include not only Army DEHs and DPWs but Garrison Commanders, Air Force Base Civil Engineers, DoD Energy Managers, and Environmental coordinators. Private sector readers interested in Army Facilities management also read the* ***Digest****.*

Conceived as a quarterly publication, the ***Digest*** *now publishes ten times a year. "Great stories from our installations and from around the Corps, along with changes in organizations and programs, assure there is always enough news to fill even more issues!" said Schmitt, now Chief of the CPW Public Affairs office.*

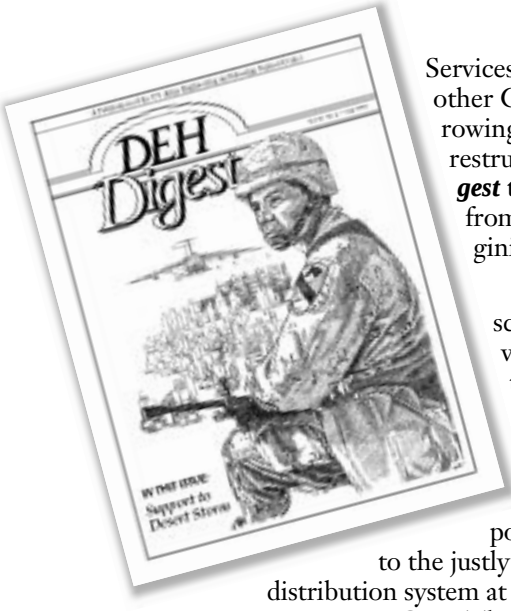
A cavalcade of ***Digest*** *covers only suggests the dramatic changes and events the publication has chronicled over the years.*



1988—Army Communities of Excellence: Building on a concept that originated in the Training and Doctrine Command (TRADOC), the Army initiated a program to promote excellence in living and working conditions at Army installations. The ***Digest*** followed the story closely, covering Excellence initiatives at many installations, including Resource Management at Redstone Arsenal, Customer Service at Fort Leonard Wood, Self Help at Fort Jackson, and Work Management at Fort Bragg. Over the years, the Communities of Excellence concept has become an important part of everything installations offer soldiers, from better training ranges to better barracks, and the ***Digest*** has been there to cover Army successes.

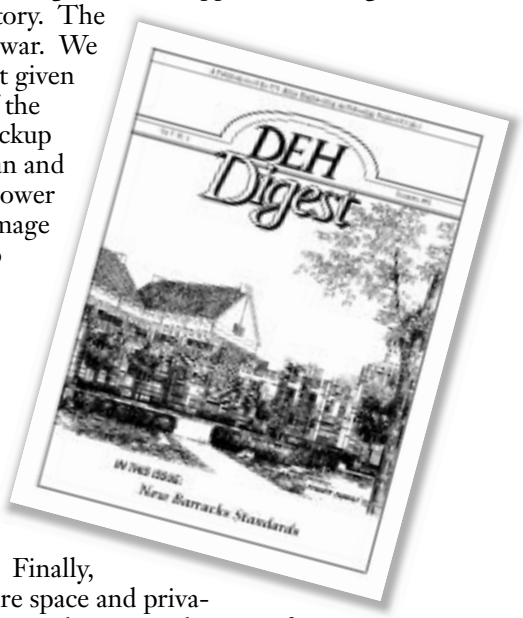
1989—Hurricane Hugo, Just Cause & Emergency Operations: Fine-tuning the quality of every day life was becoming routine for the Army, but crises kept coming in 1989. The ***Digest*** was there to cover turbulent weather and conflict. Our photojournalist Mark Ray traveled with members of the 249th Engineer Battalion to document the recovery efforts after massive hurricane damage in the Virgin Islands following Hurricane Hugo. Later in the year, ***Digest*** Editor Penny Schmitt stayed in touch with the 249th's soldiers in Panama as they manned critical power stations in preparation for Operation Just Cause, and helped Panamanians recover from the aftermath of battle. Schmitt also transmitted PAXmail messages to soldiers cut off from normal communications during the Christmas holidays. ***Digest*** stories detailed these emergency operations, and shared information on safety and emergency management for more routine actions like confined space entry and trench-digging safety.

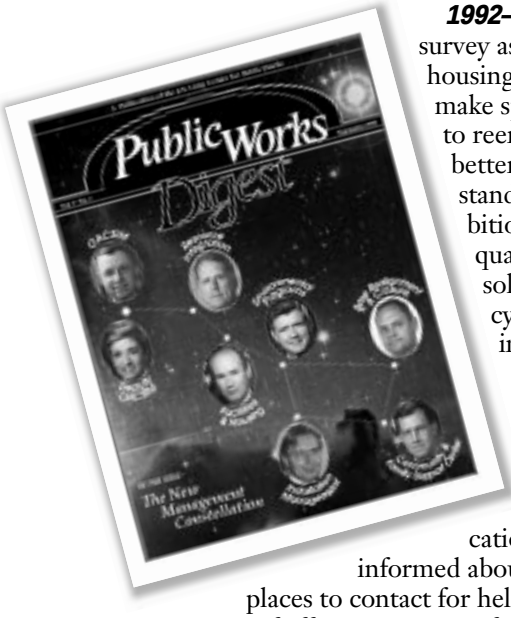
1990—The Public Works Center experiment: As the decade turned, attention in the Armed ➤



Services turned to costs and business processes. Engineering and Housing Support Center and other Corps of Engineers staff studied the potential for setting up Public Works Centers, borrowing from the Navy's concept. Though the concept was not implemented in its entirety, the restructuring effort proved to be a sign of things to come. Throughout the decade, the ***Digest*** told the developing story of changes in the installation engineers' title and job focus from DEH to DPW, the establishment of a regional directorate of public works in the Virginia peninsula area, and the evolution of new business management concepts.

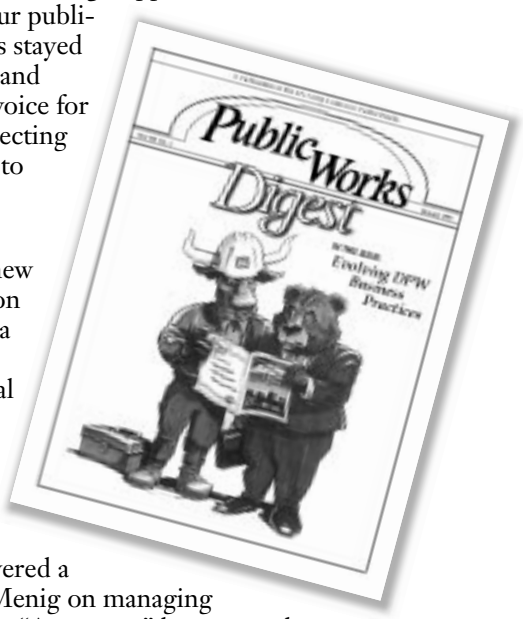
1991—War in the Gulf: It's what the Army trains for—and hopes will not happen: full-scale armed conflict. Managing installations vacated by deploying troops, providing services for the families who stay behind, and providing excellent support and living conditions in the field are all part of the Engineer story. The ***DEH Digest*** covered BASOPs aspects of the war. We also proudly covered the outstanding support given to the war and recovery effort by soldiers of the 249th Engineer Battalion, who provided backup power support to the command center in Dahran and to the justly famous Patriot missiles, set up an expedient power distribution system at the surrender site, and conducted the first damage assessment in Kuwait City. The story continued with the Battalion's efforts to support the Kurds during Operation Provide Comfort.

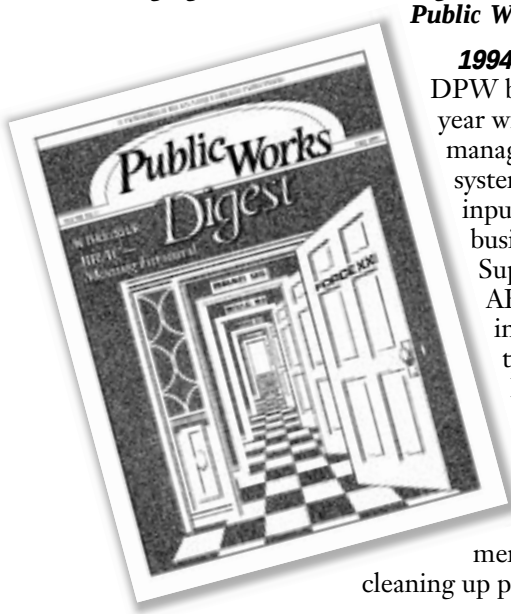




1992—Better barracks/better homes: A tri-service survey asked soldiers how DoD could improve the housing for single service members in the future and make specific changes that might affect their desire to reenlist. The results showed a crying need for better housing, paving the way for a new barracks standard. Soon the Army would institute an ambitious program to upgrade its aging family quarters with whole neighborhood revitalization. Finally, soldiers were going to get what they wanted, more space and privacy and an improved quality of life. The ***DEH Digest*** became a showcase for installations as they implemented these new facility initiatives.

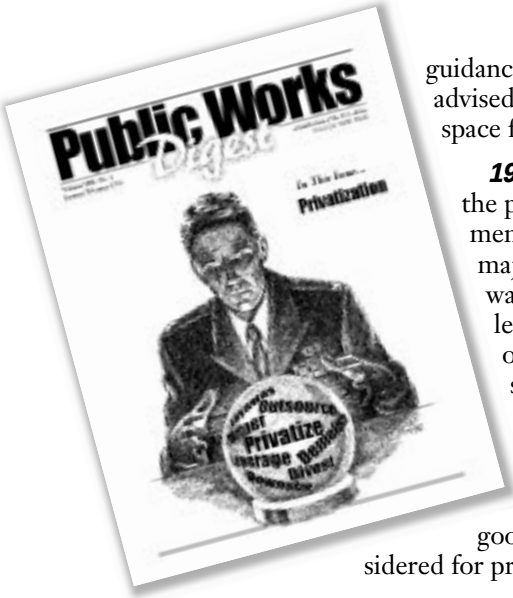
1993—The ACSIM is born: In a major change for the installation management business, the Army Staff established a new organization: The Office of the Assistant Chief of Staff for Installation Management. The Office of the Assistant Chief of Engineers was disestablished and the Engineering and Housing Support Center became the Center for Public Works in the process. Our publication made sure that Army installation customers stayed informed about organizational changes, and knew the faces and places to contact for help with their business. We provided a critical voice for continuity of effort in support of our installations during a time of change. Reflecting the changing scene and broadening focus, the ***Digest***'s title changed from ***DEH Digest*** to ***Public Works Digest***.





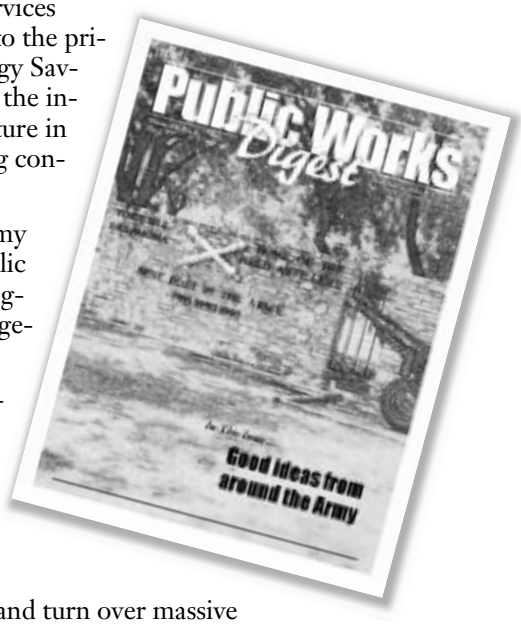
1994—Taking a Business Approach: Bullish on the DPW business? Certainly. The ***Digest*** opened the new year with features on new directions in the installation managment arena. Activities Based Costing (ABC), a systems approach to identifying the real costs of all inputs to the DPW process, was only one of several business-oriented approaches to Base Operations Support. The ***Digest*** introduced readers to ABC, shared news of a literally prize-winning incentive program to improve employee safety, carried the story on major changes to the Federal Acquisition Streamlining Act, and covered a critical presentation by Deputy ACSIM Jan Menig on managing Full-Time Equivalents under new rules. The "Army way" began to take on a corporate look.

1995—Installations Implement BRAC: The days of Base Closures and Realignments as front-page news were waning, but the real work of moving, shutting down, and cleaning up proved to be a major "how to" story in the ***Public Works Digest.*** Army leadership shared



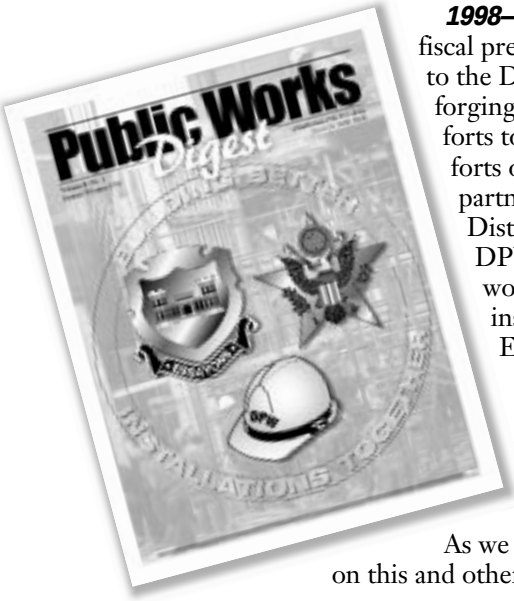
guidance and policy information through the pages of the magazine, and installation DPWs advised others on the best ways to turn over property, meet environmental requirements, find space for new units, tear down obsolete facilities, and prepare installations for future missions.

1996—Privatization surges: Tired of doing less with less? By 1996, DPWs were weary of the process of meeting ever-stricter environmental and other requirements with fewer staff members and less money. In 1996, a new answer to the problem began to surface as a major initiative—Privatization. The idea of turning over utilities—electrical, natural gas, water and sewer treatment infrastructure and operations—gained credibility with Army leadership. The ***Digest*** followed the Privatization story as it progressed from the status of a good idea, to an alternative leadership strongly encouraged, to a directive with ever-shorter deadlines. We published stories on services available to help installations ready to dive into the privatization process, creative options like Energy Savings Performance Contracts that could help the installation prepare to turn over its infrastructure in good condition, and stories about new areas being considered for privatization, like Army Family Housing.



1997—Installations tell their stories: Always a source of news about Army installations, the ***Digest*** began to move to in-depth portraits during 1997. Chief of Public Affairs Penny Schmitt became a regular participant on Staff Assistance Visit teams, bringing back detailed "how-to" stories explaining the reasons behind some significant management successes. Her stories included:

- The massive design by charette process that shaped Fort Leonard Wood's new training complex.
- The work-management system that drastically shrunk Fort Bragg's backlog of work orders, making preventive maintenance possible once again.
- The customer-linked work management teams that let Fort Sill share decision making about deployment of scarce resources with customers.
- The unique problems and challenges of managing U.S. Army Reserve installations.
- Innovative methods used by USARSO's Directorate of Public Works to close down and turn over massive amounts of federal property to the Government of Panama.



1998—The Corps revolutionizes Installation Support: New technological possibilities . . . fiscal pressures . . . shrinking work forces . . . more business-oriented and outsourced approaches to the DPW business, all combined to make the Corps a natural partner with installations in forging more effective Base Operations. The ***Public Works Digest*** followed revolutionary efforts to change both the Corps and installation DPWs into cohesive teams. We covered the efforts of the Corps Reinvention Center for District Support to Installations to establish new partnerships and field new types of contracting instruments. We were there for Rock Island District/Rock Island Arsenal training that prepared the District to operate as one team with DPW staff. We sat in staff meetings at Fort Sill with the Tulsa District representative who would become one of the first "Corps Forward" engineers assigned in direct support of an installation. We saw installation computer screens tied into Corps LANs and the Corps of Engineers Financial Management System.

Yet to come . . . Currently, the Corps is initiating a major restructuring of its Military Programs Division that will bring about further changes in the Installation Support business. As MG Milt Hunter said, "We must get closer to our customers. What we are doing will embed the Corps in the working Army." He spoke of actions under way to establish Public Works Service Centers within seven of the Corps' eight divisions. As we have for ten years, the ***Public Works Digest*** will continue to bring you the breaking news on this and other stories that affect your daily life and work.

And one more thing . . . The ***Digest*** staff, past and present, thank you for your comments, we thank you on behalf of all those whose services you have tapped to make installations better to live and work, and most of all, we thank the dozens of you who have written stories and sent pictures that share news about your installations, your business processes, your successes, and the lessons you have learned. ***Keep the news and photos coming!*** PWD

Penny Schmitt, *Chief, DPW Liaison Office & Public Affairs*
Alex Stakhiv, *Editor*, ***Public Works Digest***
Linda Holbert, *Distribution*
Mark Ray, *former Editor*
Richard Brown, *former contributing writer*
Torrie McAllister, *former Chief, DPW Liaison Office & Public Affairs*

Barracks, Privatization, S&A Rates featured on VTC agenda

by Penelope Schmitt

LTG Ballard opened the second year of video teleconferences with thanks to the Army's DPWs. "The feedback, the exchange, have been very beneficial," he said. The onscreen evidence of successful growth in partnerships and collocation was abundant, as many DPWs are now joined in the VTC by their Corps Forward staff member, their Area Engineer, or even their District Engineer.

The Chief made it clear that continuing to develop the partnership holds a high priority in his opening status report to the DPWs. Corps support to the Commercial Venture Initiative (CVI) for Army Family Housing, Utilities Privatization, and Corps efforts to deliver a warranty program and improved management of S&A rates were his primary topics.

CVI—It's alive!

"I don't need to tell you that CVI is a high priority for the Army. We have tried to bring Fort Carson on as a demonstration project, and you all know we ran into some roadblocks. But CVI is still a sound idea. It's alive. We're going to move forward with it."

LTG Ballard reported that a recent directive from Army Leadership has laid out a clear roadmap for CVI. The Assistant Chief of Staff for Installation Management (ACSIM) will serve as the Program Manager. The Corps will execute the program. With ACSIM providing central management, the Corps will cooperate in making the operations plan and prepare to execute an ambitious schedule. "We have been directed to execute 41 projects by the first of December in the year 2000. That's a lot to get done! We will need your cooperation and collaboration on this," the Chief told DPWs.

Jan Menig, the Deputy ACSIM, reinforced the Chief's urgency. "There is a sunset clause on the enabling legislation," she said. "We have to DO this. We have to show success in the next year. We will never get this massive job done through Congressional appropriations."

"Recently FORSCOM asked us to declare that mobile homes would be ruled inadequate housing under the program," Ms. Menig reported. We said *'No.'* Millions of Americans live in mobile homes. We are not going to be able to get a DoD decision saying no mobile homes."

Fort Gordon's DPW recalled that a forum to discuss Fort Carson lessons learned had been scrapped because of the holdups in that program. "We would still like to have some sort of forum to get a clear understanding and help us get started!" he said.

Fort Leonard Wood's DPW, LTC Tim Daniel, asked for clarification on the ways in which School Impact Aid may be affected by CVI. "We run the risk of big problems," he said. "We need answers!"

Both MG Milt Hunter, Director of Military Programs, and LTG Ballard replied that a forum would be held to answer these and other questions. "As soon as the policy guidance on the program becomes final, we plan to take the next four installations in line and hold a forum for you. We should have word on this within the next few weeks.".

Utilities Privatization—The clock is ticking!

"We are all aware that the year 2000 is our deadline for privatizing our utility systems, except when security forbids it, or it makes no economic sense," LTG Ballard said. "We think Military Programs has a good handle on assisting you. Our Real Estate Directorate will be helping you with transfers and easements. Those utility contracts have got to get written! There's a lot of concern about moving this forward, especially with electricity. Time is getting short—this one requires all your collaboration!"

Ms. Menig added, "I know your concern is that your utilities bills will go up. I have to ask you to take the whole Army view on this. When you look at the cost of upgrades and compliance, the cost of maintenance people, and all the other associated costs, it will save money. You just can't lean on the cost to your installation as a reason not to privatize. There is going to be money to pay that must pay bill."

Ms. Menig reported that the ACSIM website has posted lessons learned about utilities privatization. In answer to a question from an earlier VTC about the 10-year time limit on utilities privatization contracts, she said. "The reason is in the Federal Acquisition Regulation (FAR), which sets a 10-year limit." *(See FAR part 41)*.

Several DPWs commented on a recent privatization seminar held in Monterey. "The conference was excellent," said John Baggett, Deputy DPW at Fort Benning. "But we still have concerns about our environmental documentation." He and his environmental attorney asked:

- What type of planning documents need to be submitted? We can do our own Environmental Assessment to comply with NEPA, but this will slow us down. It would be helpful to have a programmatic Environmental Assessment to use as a baseline.
- What compliance stance must we be in before we turn the utility over? What about contamination in any easement we grant? This, too, could slow us down a lot.
- What if we are not completely in compliance? Can we turn our utility over?
- Is any funding available to support environmental documentation efforts?

Barry Frankel, director of Real Estate for the Corps, responded that he would query the Army General Counsel on the need for an Environmental Assessment. LTG Ballard surmised that utility companies would probably require that some sort of baseline study be submitted.

Pat Rivers, Chief of the Military Programs Environmental Division, gave DPWs the following advice:

- **First:** You do want to know the condition of any land and buildings before the transfer is accomplished. Maintenance needs may have to be addressed.
- **Second:** If cleanup is required, negotiate the right to go in and accomplish the cleanup after the transfer is complete.
- **Third:** Do you have to be in full compliance? Can this be negotiated? We need to check this for you.

Menig responded to the question about funding. "We [the ACSIM] paid for the economic analysis you were required to do under Circular A-11. The Center for Public Works has that and executes that budget through their contract with Guernsey. We also have $40 million in Energy Conservation funding. This was intended for conservation projects, but some of your MACOMs are taking that and using it for privatization. If you need more money, you will have to call TRADOC—your MACOM—to get that funding."

COL Gravatt, DPW at Fort Eustis, asked for assistance with the "Contribution in Aid of Construction" tax issue which is making transfers expensive for some DPWs. Ms. Menig replied, "It exists, and you have to pay it. The problem we have is with something called the PayGo Act. The Office of the Secretary of Defense and the Office of Management and Budget are working this issue, but we haven't been able to get relief yet. Until there is a change, you will have to pay that contribution."

The Presidio spokesman reported that his installation had completed all privatization except for water. He urged DPWs entering the process to "Watch compliance! Do a good baseline study!". . . and most of all, to "negotiate, negotiate, negotiate!"

Summary Development Plan—a new tool for the master planning tool box

Installation Directors of Public Works must face the tough challenge of updating their installation master plans in such a way that they remain affordable and still relevant to the installation commander. They want the master plan to be the commander's principal real property and planning management tool for any decisions that he makes on overall installation operation, management, and development.

To help installations cut down on the cost of developing and updating the Real Property Master Plan, CPW has initiated the Summary Development Plan (SDP). Modeled after the Air Force's General Plan, it covers all the basic components of AR 210-20 and uses the same nine-step process for Real Property Master Plan development.

The SDP represents the minimum essential requirements an installation needs to provide for an installation master plan. It uses information from the existing Real Property Plan, RPLANS, ISR, and CADD/GIS to develop a planning document that can be maintained by in-house personnel. Developed using commercial off-the-shelf software (i.e., Microsoft Office, Front Page, desktop publishing and digital cameras), the SDP is a very visual document structured for use by installation commanders. CPW is producing the SDP as a webb-based product, available also on CD and hard copy.

In June 1998, the Real Property Planning & Management Steering Committee voted to add the SDP to the master tool box.

Installations expecting end of year funding are candidates for SDP. Based on the Air Force's experience, we expect SDP to cost $100,000 to $150,000.

Currently, SDPs are under development for Fort Shafter (USARPAC), Fort Eustis (TRADOC), and several Brigade Support Bases (BSB) (USAREUR). Early feedback comments from Europe's installation commanders include: "The SDP is exactly the level of summary planning I need."

For more information on SDP, please contact Jerry Zekert at CPW's Planning & Real Property Division, (703) 428-6139 DSN 328, or your supporting Corps of Engineers District. PWD

S&A Rates—Watch this space!

"I've been hearing your comments about S&A rates," LTG Ballard said. "You're telling me: 'Too high!' and 'I'm not getting what I paid for!' I take you very seriously. So I have formed a group to look at this issue. Next week I will be holding a VTC with my Division Commanders to discuss how we will handle this for the remainder of 1998 and on through 1999. We're going to be asking ourselves some hard questions. What goes into S&A charges? What is fair? I will be coming back to you and involving you in the process." ➤

Fort Rucker's DPW responded, "We appreciate your efforts on S&A rates. We turn to our district for smaller and smaller jobs. It used to be million-dollars and up renovations and the like. Now it may be an upgrade of a General Officer's quarters. Whatever can be done to lower the S&A charges on small jobs will be helpful."

"You put your hands right on it!" the Chief said. "Keep giving us those small jobs and we will work on what's fair!"

In a related issue, the Deputy DPW of Fort Huachuca said. "I have one item that's dear to my heart and my pocketbook. Warranty!"

"I knew you'd ask!" the Chief said. "We have worked on this. You will be hearing very soon. And there will be a warranty program soon!"

Y2K—Creeping up!

The year 2000 is only 18 months away, LTG Ballard reminded DPWs. "Talk to your district. Don't try to go it alone! You probably won't be able to get everything perfect, but make sure you're as close to being right as you can be."

Fire Trucks—Still pushing uphill!

Ms. Menig reported that ACSIM is still working hard with SARDA and the Office of the Secretary of Defense to raise the current $100 thousand dollar limit imposed on purchases of fire trucks. "We know this ceiling is at least ten years out of date, and the new one, if we can get it, will probably still be ten years out of date. All I can say is, we will keep pushing."

Barracks—MACOM's side of the court!

Comments from Skip Field, Chief of Engineering at Fort Jackson, showed the frustration of DPWs waiting for barracks upgrade funding. "Our Rolling Pins [barracks] are a little better than the Tijuana Jail," he lamented. "We need some funding for our Starships! Anybody can be famous for building a $20 million-dollar building—but running a it for a dollar ninety-eight is really something! We need showers! HVAC! Latrines! Roofs! The basics!"

"You're in good company with the rest of TRADOC," LTG Ballard answered. "You're right. The problem is, there's not enough to go around to fix it. But I've got to tell you to keep crying until your MACOM Commanders go back to central funding the way you did last year."

Ms. Menig agreed. "I'm tracking [the execution], and it's not going! We did a paper trail on this program. The fact is, some General Officers don't support putting funding into barracks. I say . . . back to you! Last year we put $400 million into barracks. We made great improvement! Educate your General Officers to speak up for barracks. Show your VIP visitors how bad the situation is! It's our number one priority."

Fort Knox struck the keynote on Training Barracks, emphasizing that troop time spent on R&U tasks was taking away from training time and affecting retention. "The standard design now for Training Barracks is the Starship. We have put together a PAT team that includes senior NCOs and Drill Sergeants looking at what the vision for Training Barracks ought to be. They are telling us Company-Size buildings would be a better solution. We would like to see USACE take this on!"

LTG Ballard recommended the study group forward its findings to MG Hunter, Director of Military Programs.

TRADOC Schoolhouses—investment needed!

"Classroom XXI is just the tip of the iceberg of what's needed to bring our training infrastructure into the Digital Army," Fort Knox's DPW emphasized. He raised the need for training range upgrades, facility renovations, and new buys in the audio-visual and computer arena.

"This is another HQDA planning issue, where there's not enough funding in the POM!" he said.

Mr. Sakowitz of TRADOC Headquarters agreed. "You're right. Bell Hall . . . Snow Hall . . . It's an Army issue. We have to sit down and see where we are going, set priorities. All the projects I see are good ones!"

Other issues—Bushel of questions.

Ending this especially high-octane teleconference, the Chief of Engineers and the Deputy ACSIM promised DPWs more information and study of a number of other issues, including the following:

- Fort Leavenworth asked for help in managing its historic buildings—51 percent of the installation's facility inventory. Ms. Menig promised an Army regulation to help installations work with State Historic Preservation Offices.
- Fort Knox worried that OPA funding was not always available to support new ranges with new digital targetry equipment.
- Several installations asked for better guidance on gender separation issues.
- Fort Huachuca sounded an early warning that T1 lines connecting Districts and DPWs may be pulled as part of an Armywide effort to frustrate hackers. Reaction to this was instant on the part of all participants—improved communication among Corps and DPW partners is prized and working. "We may need additional firewalling!" The Chief said. "I will blow into this!"

One thing is certain—now that this community has mastered the art of conferring on screen, the number of issues and questions covered in a two-hour period is getting deeper and more detailed every quarter. PWD

Penelope Schmitt is the Chief of the DPW Liaison Office at CPW.

We need your help!

Don't forget to complete the Readership Survey on p.29 and mail it back to us. Your input is important!

Work plan contracts solve chronic problems at West Point

by Douglas W. Robb

With its beautiful site on the Hudson River and its magnificent Military Gothic architecture, the United States Military Academy (USMA) at West Point is a national historic treasure.

We are all faced with decreasing manpower and funding, and increased demands. Work plan contracting is one way to deal with chronic, repetitive problems with more than one possible solution.

Work plan contracts, pioneered by the Huntsville District, CoE, to help correct major HVAC problems at Forces Command installations, are negotiated indefinite delivery, indefinite quantity-type contracts. The contractor is selected using a two-step, best value procurement. During the first step, the contractor investigates the problem and formulates a solution. After discussion and approval of the work plan by the installation, the CoE negotiates the cost of the solution with the contractor, and awards a remediation contract for that amount.

With its beautiful site on the Hudson River and its magnificent Military Gothic architecture, the United States Military Academy (USMA) at West Point is a national historic treasure. While most of its granite-faced buildings look old, there are only a few that actually date from the early part and middle of the nineteenth century. The majority of the barracks and academic buildings were built in this century. Interestingly, it is these more modern buildings that suffer from chronic problems with water infiltration.

Water infiltration problems are some of the most difficult problems that facility engineers can face, because water tends to travel long distances from where it penetrates the building envelope (roof, coping stones, parapet walls, walls and/or windows) and where it appears inside the building. Often, you find what you think is the source and seal it, only to discover that there is more than one source or you have merely redirected the problem elsewhere.

Most of the problems at West Point result from poor construction and use of the wrong building materials. These built-in problems have been compounded over the years by misguided repair and maintenance work.

In most cases, the problems involve through-wall flashing that is missing, reversed, non-continuous, and/or has fallen; window flashing with no dams at the headers; or unflashed coping stones— all of which are exacerbated by roof and drainage problems. It is impossible to write a lump sum repair contract, and extremely difficult to create even a unit price contract that covers all of the possible combinations and permutations.

Not only does each building exhibit unique problems, even adjacent wings of the same building are different. As a result, most building renovation contracts at USMA have required several modifications to cover all the problems uncovered during construction.

No one had a solution until Jerry Caspe, Chief of Military Programs, New York District (NYD), Corps of Engineers (CoE) suggested that a work plan contract might be the answer. The major advantages of work plan contracts are speed and cost savings. Instead of the 12–16 months of the traditional program, design, solicit, award and then construct cycle, a work plan contract solution can be identified, investigated and implemented in 2 months or less.

USMA is already recycling the work plan contract idea to attack its elevator problems. With the help of Annemarie Kopko of our local Directorate of Contracting (DOC), we have come up with a variation on the work plan contract. Three firms will be contracted to investigate and propose solutions to our aging and failing elevators.

Basically, there are three possible solutions: repair, replace with a hydraulic system, or replace with an electric system. The selected contractor will make his recommendation, and after approval by USMA, prepare the plans and specifications. Then all three contractors will be solicited for bids. Again, the biggest benefit is the speed with which a contract can be awarded.

So if you have a chronic problem that doesn't have a single solution, maybe work plan contracts are the answer. PWD

Douglas W. Robb is the Chief, Engineering, Plans and Services Division, USMA, (814) 938-2521.

Privatizing utility systems is one of the Defense Reform Initiatives to reduce infrastructure, which were announced by Secretary of Defense William Cohen in November 1997. The Office of the Secretary of Defense is developing the guidance for implementing the initiative by the Services, including the criteria for exempting specific utility systems for security or economic reasons.

Army to privatize utilities by 2000

by William F. Eng

On March 25, 1998, the Army submitted its implementation plan to privatize 265 utility systems, serving the major active installations in the Continental United States, Alaska and Hawaii, in accordance with the December 10, 1997, Defense Reform Initiative, Directive #9. A supplemental plan is being developed to address Army installations overseas in Europe and the Far East, as well as the numerous smaller sites serving the Active, Reserve and National Guard Components.

The goal of the Army's program is to privatize by January 1, 2000, all installation utility systems except those needed for unique security reasons or when it is uneconomical. The utility systems in the program are electrical generation and distribution; natural gas distribution; water supply treatment and distribution; and wastewater collection and treatment.

A separate $300 million Army-funded program is underway to modernize many central heating systems, so they are not part of the utility privatization program. However, some installation commanders may want to consider privatization anyway, especially if their central heating plants were not included in the modernization program.

A history of underfunding

The end of the Cold War has precipitated the largest military drawdown since the end of WWII and draconian cuts in military spending. The choice of modernization of weaponry over installation infrastructure ultimately results in deterioration from lack of funds for preventative maintenance and repairs.

Public works managers respond to underfunding of budget requirements by deferring the maintenance and repair work, which eventually results in accelerated deterioration and premature failures. In the early 1990s, when the Army started privatizing utility systems as an alternative to owning and operating them, a tremendous backlog of essential maintenance and repair work developed, totaling well over $3 billion. For utilities systems alone, the backlog was estimated as $857 million at the end of fiscal year 1994.

Condition assessments

What is the result of these many years of insufficient funding of the Army's Operation and Maintenance (O&M) budgets on installation utility systems? Using a new standardized rating scheme, called the Installation Status Report (ISR), which can be applied uniformly across the Army, leads to "C" ratings, on a scale of 1 through 4, with C1 being the highest and C4 the lowest rating. The utility systems at most installations have been rated using the ISR system. The average 1997 ISR rating is C3 for Army electrical distribution systems and substations, C3 for natural gas distribution systems, C3 for water supply systems, and C3 for wastewater disposal systems.

Utility modernization estimates

The ISR system includes a cost estimating module to determine the costs for bringing facilities from their current ISR rating up to the highest rating, C1. The program estimate is $655 million to upgrade the Army's electrical distribution and substation systems; $280 million for the natural gas distribution systems; $6,137 million for the water supply and treatment systems; and $3,258 million for the wastewater treatment and disposal systems.

Utility strategy

Faced with the dilemma of having to modernize $15 billion worth of utility systems but not having the necessary funds to pay for it, the Army has developed a three-pronged strategic plan to still provide reliable utility services in a cost-effective way:

1. Privatize utility systems to the maximum extent possible by seeking out opportunities for public and investor-owned utility companies.
2. Modernize only those utilities that can not be privatized.
3. Continue to seek increased maintenance and repair funding to prevent further degradation.

Army's approach to Privatization

In the early 1990s, Army doctrine and long-range planning guidance, such as The Army Plan and The Army's Vision for the 21st Century, strongly promoted privatization of basic installation services. To the Army, "privatization of utilities" means shifting the entire gamut of ownership responsibilities—operation, maintenance, repair, overhaul and upgrades to industry standards from federal ownership to non-federal (local, county, regional government or investor) ownership. Public utilities have access to investment capital and contracting strategies closed to the Army. Entities, whose sole mission is to operate a utility system, will also find it easier to comply with increasingly stringent environmental requirements.

Policies and procedures

The Army has had a policy since 1991 (OCE memo, 5 September 1991) that favored obtaining utility services from municipal and regional utility systems or private utility companies rather than to continue to own and operate separate Army-owned systems. The policy has been re-emphasized, strengthened, and added to a number of times from 1994 through 1997, (ACSIM memo, 13 De-

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cember 1994; ACSIM memo, 17 March 95; AR 420-49; ACSIM memo, 29 April 1997; CSA memo, 1 May 1997; USACE memo, 10 October 1997). These documents may be viewed on the ACSIM homepage at http://www.hqda.army.mil/acsimweb/fd/util.htm.

In November 1998, the Secretary of Defense announced his Defense Reform Initiatives which detailed a broad range of programs to reduce infrastructure and change the way DoD does business. You may view the DoD report at http://www.defenselink.mil/pubs/dodreform/index.html. The specific DoD Directive addressing the privatization of DoD utilities is available at http://ca.dtic.mil/dri/drids/

As a result of the Army's program, the number of systems privatized grew to 15 by the end of FY 97, with 11 at still active installations and 4 at installations that subsequently became BRAC.

The Army policy to privatize utility systems grew out of the necessity that installation utilities are able to: (1) support vital installation missions, (2) be reliable, (3) be resource efficient, and (4) leverage technology. The rationale is to obtain utility services from the most efficient private/public sector providers. This is accomplished through a transfer of the installation utility infrastructure to a private/public sector organization that takes over the responsibility to own, maintain, repair and eventually dispose and replace the utility systems to meet current and future requirements of the Army installations.

The entity acquiring ownership of the distribution system may/may not be a regulated utility and may be a separate entity from the supplier of the commodity, such as electricity or treated potable water. The Army believes that, in general, privatizing utility systems is the most cost-effective way of obtaining these services for the installations. Each utility privatization action will be based on life-cycle cost economic analyses of proposals from prospective utility providers compared to the cost of continued retention by the Army and operated at a comparable level of service and upgrade (should costs). The Army intends to make full use of the permanent authority recently granted in legislation (PL 105-85, Sec 2812, 10 USC 2688) to the Secretary to convey all or part of a utility system, under his jurisdiction, to a public or private utility or other entity.

Privatization progress

Progress on privatizing utility systems has been steadily improving since 1993: 11 utility systems have already been privatized, including 7 natural gas, 2 electrical, 1 water, and 1 wastewater system. Many other systems are now in various stages of the privatization process and more are under study or planned for evaluation and study in the next year. PWD

William F. Eng works on Utilities Privatization issues at the ACSIM.

Privatization Case Studies

Electrical Systems:

Fort Dix, New Jersey (Transferred)
Twin Cities Army Ammunition Plant, Minnesota (Transferred)
Sunflower Army Ammunition Plant, Kansas (Pending)
Fort Irwin, California (Contract in routing)
Fort Campbell, Kentucky (Contracting action)
Schofield Barracks, Hawaii (Under study)

Natural Gas Systems:

Fort Leonard Wood, Missouri (Transferred)
Fort Monmouth, New Jersey (Transferred)
Fort Belvoir, Virginia (Transferred)
Fort Dix, New Jersey (Transferred)
Twin Cities Army Ammunition Plant, Minnesota (Transferred)

Water Supply and Distribution Systems:

Fort Lee, Virginia (Contracting action)
Fort Story, Virginia (Transferred).
Aberdeen Proving Ground, Maryland (Contracting action)
Fort Gordon, Georgia (Contracting action)
Fort Ritchie, Maryland — Transferred
Fort Pickett, Virginia — Transferred
Oahu, Hawaii (Contracting action pending)

Cooperative venture reduces demolition waste and offers cash back incentive

Fort McCoy is taking action to salvage and provide for the reuse of building materials that were obtained using taxpayer dollars in a "win-win" cooperative venture.

The wood-frame buildings being disposed of in support of the current Army Facility Reduction Program were nearly all constructed in 1941-42. Equipped with outdated coal fired heating plants, many of these buildings now need costly structural repairs. By modern standards, their lighting and electrical services and plumbing fixtures are inadequate. The majority of these buildings are soldier barracks, food service buildings, and unit supply and storage facilities.

The disposal of these buildings in large numbers presented a major drawback for Fort McCoy. Hiring a contractor to demolish so many buildings and then haul the waste material to a landfill was both costly and wasteful. Because they believed the buildings had a local market for off-site removal of wood and other construction materials, personnel from Fort McCoy and the Omaha District, Corps of Engineers, worked together to develop a more efficient method of disposal sales.

Armed with approval from Headquarters, U.S. Army Corps of Engineers, Management and Disposal Division, Directorate of Real Estate (USACE), and authority from the District Engineer, the Installation Commander's Chief Real Property Officer conducted a new version of a building sale program as a test method of disposal at Fort McCoy. The delegated authority covered specified administrative parts of the real estate disposal process. Added staff support ➤

was provided by the Directorate of Support Services (DSS), formerly the Directorate of Public Works (DPW).

Today Fort McCoy markets and sells its excess buildings in a unique cooperative venture with the District Engineer. Fort McCoy now performs many functions that were previously performed by the District Engineer including:

- Preparing an Invitation for Bids (IFB) with format and content approved by the District Engineer.
- Coordinating with installation officials to identify buildings to be disposed of and obtaining the necessary disposal clearances (DA Forms 337).
- Advertising and showing the buildings to prospective bidders.
- Conducting a bid opening with an abstract of the bids and collection of bid money for the District Engineer and related customer relations activities.

A sales contract is still executed by the District Engineer for the local sales program, but it is almost entirely administered by the installation under the direction of the Chief Real Property Officer. Fort McCoy has been successful in resurfacing building disposal sales as a proven method of building disposal. With the assistance of the Omaha District Engineer, this new cooperative venture has improved the disposal process and is being proposed for the USACE revisions to AR 405-90 to allow such delegations to be made where other cooperative ventures will realize the same benefits.

Today, all excess buildings at Fort McCoy are advertised to the general public for demolition sale. When using this method, the government actually receives money from the highest competitive bidder and in turn grants a contract to demolish a building and remove all of the usable materials from the installation. Current bids amount to nearly $1,000 for smaller buildings and up to several thousand dollars for larger buildings.

All money collected by Fort McCoy from the demolition sale program is sent to the District Engineer and then deposited in special U.S. Treasury accounts. A portion of the money is returned to the installation that generates the money. This is a revenue sharing program that divides the sales proceeds on a 50/50 basis between the Major Army Command and the installation.

A bidder who is awarded a building disposal contract must adhere strictly to contract specifications concerning safety and the prescribed steps to be followed in dismantling a building. Each successful bidder receives a safety briefing and must follow established State and Federal specifications for safety in handling all building materials, including asbestos and lead paint.

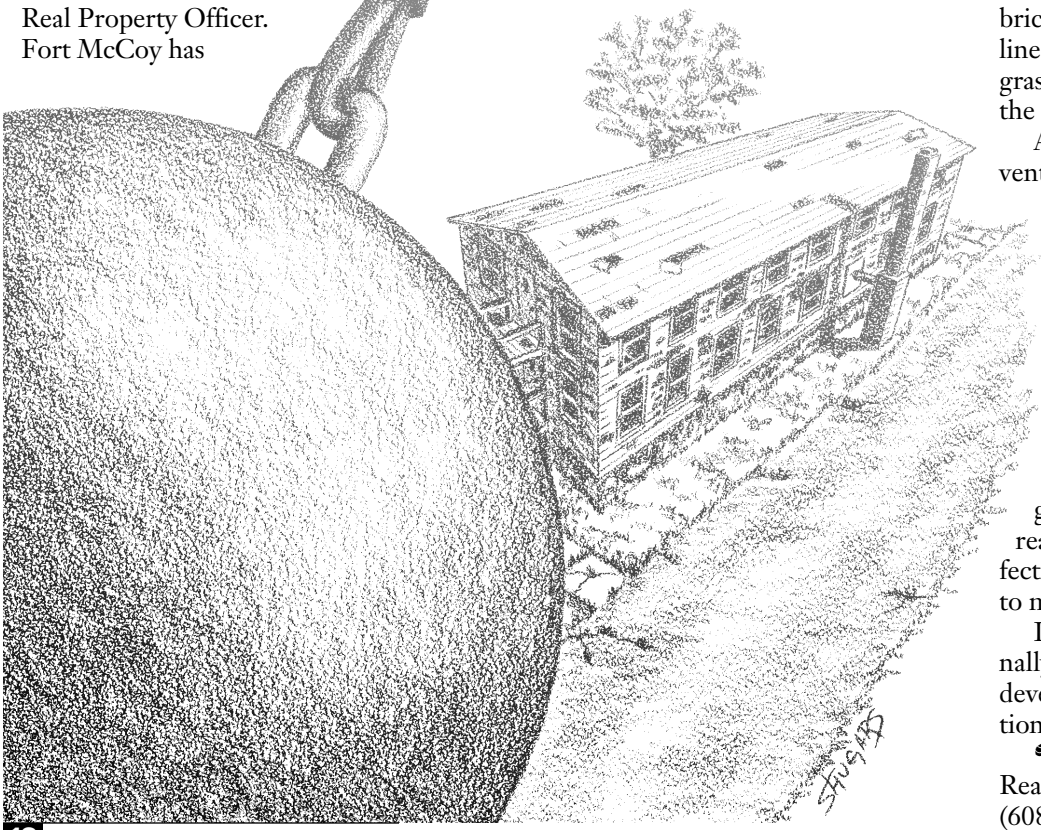
All known friable asbestos is removed from the building by Fort McCoy before it is advertised in a demolition sale. If friable asbestos is found during demolition, all work is stopped until Fort McCoy can remove the material. Material containing friable asbestos is disposed of in a public landfill that is licensed to accept asbestos material.

The bidder removes all salvageable material from a building and places scrap materials into a waste container provided by the installation. Fort McCoy then removes the container and disposes of the waste material, cleans the site of remaining debris, demolishes the building foundation, salvages and stock piles any remaining materials such as concrete footings and bricks, permanently caps related utility lines, levels the ground and establishes grass in the disturbed areas to complete the disposal process.

Advantages of the new cooperative venture in conducting a direct sales disposal method include reduced demolition costs for the Army and decreased amounts of building demolition materials that require costly and wasteful disposal in a sanitary landfill. The money that is now being returned to the installation for building disposal sales serves to indirectly offset the local cost of administering the program. An additional benefit being realized at Fort McCoy is a more effective administrative process adjusted to meet local market factors.

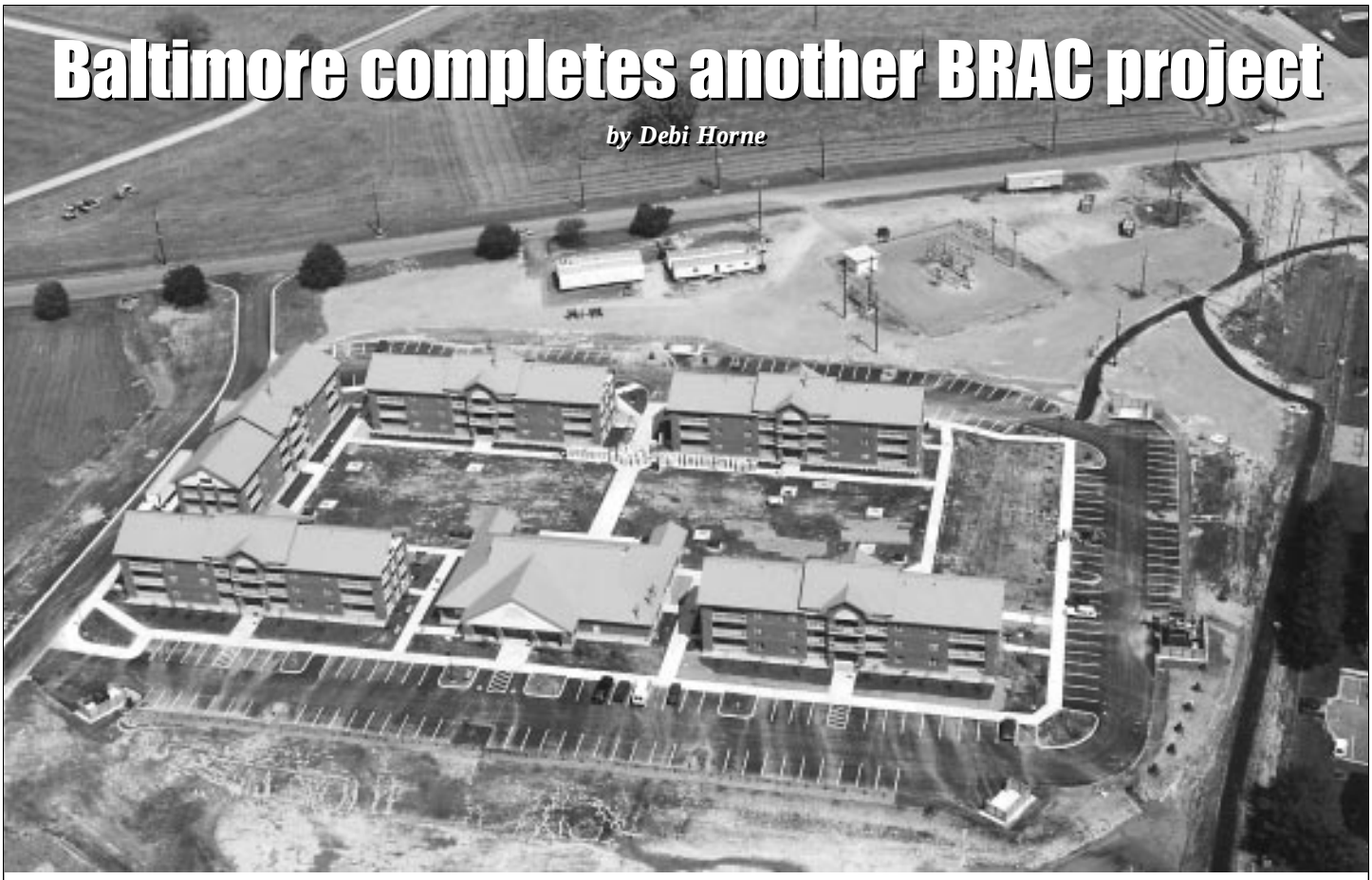
Local building disposal sales have finally become an important factor in developing good local community relations.

POC is Robert Wells, Chief Real Property Officer, Fort McCoy, (608) 388-5862. PWD



Baltimore completes another BRAC project

by Debi Horne



All speakers praised the improvements made in the quality of life for soldiers present and future during the dedication of the Unaccompanied Enlisted Personnel Housing at Fort Detrick on May 18. A community center is also part of the complex.

Contemporary living is now a new style of life for soldiers stationed at Fort Detrick, Maryland. Gone are the World War II era buildings with community bathrooms, kitchens, and bunks. Welcome to the Unaccompanied Enlisted Personnel Housing complex.

Built to accommodate the transfer of single soldiers affected by the BRAC-95 closure of Fort Ritchie, Maryland, this complex contains five barrack buildings, a community building, and a company operations building. With 48 rooms in each barrack building, the complex provides housing for up to 240 enlisted and noncommissioned officers.

Modern housing provides that lower grade enlisted servicemembers will share adjoining rooms, each with its own walk-in closet, separated by a kitchenette/bath area. Each noncommissioned officer will have two rooms, private bath, walk-in closet and kitchenette/bath area.

The community building contains a game room, pinball machines, personal mail service area, kitchen facilities, a meeting room, individual storage bins in the lower level and the central power and heat plant for the entire complex.

The company operations building contains 6,000 square feet of individual office space with modular furniture.

"The partnership of Baltimore District personnel resulted in completing the design and environmental assessment phases in record time," said Jon Sadler, project manager. "In only six short months the environmental assessment and design work, to include geotechnical and topographical reviews, site work and state approvals, were completed. This was just an amazing accomplishment and the quality of the design is outstanding.

"The teamwork and support we received from the Military District of Washington, the Office of the Assistant Chief of Staff for Installation Management, Corps of Engineers Headquarters, tenants, and the post also assured successful completion of a challenging project," Sadler added.

Sadler said this project was significant because, even with some design and construction challenges along the way, the complex was still completed three months ahead of schedule. He attributes this to the aggressive nature of the contractor, CCI, Inc., and their high quality workmanship.

Each building memorializes the lives of deceased soldiers whose dedication to duty set the example for all the soldiers to follow. At a ribbon-cutting ceremony May 18, family members assisted in unveiling the dedication plaques. PWD

Debi Horne is a public affairs specialist in the Baltimore District Public Affairs Office.

Southern Command headquarters finds a new home in Miami

by Tim Dugan

Officials from Mobile District, U.S. Army Corps of Engineers, developed a relocation plan for the U.S. Southern Command. (Photo by Buddy Perry, Mobile District, U.S. Army Corps of Engineers)

U.S. Southern Command officials started moving into their new headquarters building in Miami, Florida, on September 15, 1997. Command and control was shifted from Quarry Heights, Panama, to the new headquarters on September 26.

The relocation of the headquarters is to comply with the Panama Canal Treaty which requires U.S. troop withdrawal at the end of 1999. SOUTHCOM is responsible for all U.S. military activities in Latin America.

The evolution of the U.S. Southern Command headquarters building in Miami, has been a long, challenging road for Corps of Engineers' project manager Buddy Perry, Mobile District, Programs and Project Management Division.

Perry traces his involvement back to May 25, 1988, when he was tasked to head up a new Treaty Implementation Panama (TIP) team. Part of the team's mission was to develop a relocation plan for U.S. Southern Command headquarters. The relocation was to be in 1993. More than 100 military bases were studied and an interservice team was formed to examine in detail eight bases in the southern United States.

The team included U.S. Forces Command (FORSCOM), Air Force, Navy, and Mobile District representatives. Mobile District represented SOUTHCOM. The final two bases were Homestead AFB and MacDill AFB. A decision was then deferred for political reasons.

Additional studies were conducted in 1990, 1992 and 1993. In early 1994, COL Terry Rice, then the SOUTHCOM Engineer, requested that Perry assist in development of revised criteria for the SOUTHCOM Relocation.

The criteria were refined, reviewed and finally approved by the Secretary of Defense in 1995. The District was asked to apply the approved criteria to all CONUS locations and Puerto Rico. In a study completed in September 1995, four final sites were selected by SOUTHCOM and a recommendation made by now retired GEN Barry R. McCaffrey to the Army as executive agent.

An Army team, including Perry, examined the final four sites. Miami was selected by the Secretary of Defense and announced by President Clinton March 29, 1995. The next study was to consider the method of acquiring office space for the headquarters. Military construction at a government-owned site, renovation and expansion or a surplus counterdrug site, and leasing of a building were considered.

The Secretary of Defense selected the leasing option based on SOUTHCOM recommendations. Leasing was selected because a building could be delivered 16 months earlier than through military construction, and SOUTHCOM had the need to leave Panama as soon as possible.

Don Burchett, Mobile District Real Estate Division chief, and Perry had determined that a building of the right scope could be acquired and prepared for SOUTHCOM use in 16 months.

In July 1995, Mobile District was directed to develop a Solicitation for Offers (SFO) for leasing a 150,000 gross-square-foot building in a delineated area near Miami International Airport.

On November 13, 1995, the SFO was issued. On November 28, 1995, the Mobile District Engineer conducted a Preproposal Conference in Miami, which was attended by about 100 developers and interested parties.

During the conference one of the larger developers in Miami assured the Corps that the project could not be

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done. Five offers were accepted on January 13, 1996. A Source Selection Evaluation Board (SSEB) consisting of SOUTHCOM, USARSO and Mobile District representatives, examined the five offers. Four of the buildings were existing buildings, and one offer was for a new building to be constructed. After consideration of Best and Final Offers, the SSEB recommended and Deputy District Engineer Military Construction and Source Selection Official, LTC Timothy Reddy, selected GPA-I, LLC of Memphis, Tennessee, as the successful offeror. An Agreement to Lease was signed by Mobile District and GPA-I, LLC on March 29, 1996.

A unique construction technique was used in this contract whereby the Corps and U.S. Army Communications Command cooperated in this project and the information systems infrastructure was installed during the construction of the structure. This technique saved at least six months and many dollars. The installation was so successful that the normal failure rate of about 5 percent for the installation of fiber optics was reduced to about 1/2 percent.

Mobile District's MAJ Rob Biedermann was the project engineer in Miami handling the day-to-day challenges. The project was a GSA delegated lease solicitation for offers. The new facility provides 154,848 gross square feet of space to house the SOUTHCOM headquarters staff. Partial occupancy for the installation of furniture and communications equipment was accepted on April 17. Some $40 million worth of command, control, communications, computers and intelligence equipment was installed. Thirty furniture vendors installed more than $3.5 million worth of furniture.

The SOUTHCOM headquarters building has been toured by many high ranking officials, including the Secretary of the Army, Under Secretary of the Army, several assistant secretaries, the Chief of Engineers, and many general officers. Comments made by the visitors have been very positive, Perry said.

SOUTHCOM had previously occupied many buildings located on five different bases in Panama. One of the bases was on the other side of the Panama Canal from the other four.

Now the entire command is located in one new building, equipped with new furniture and state-of-the-art computers and communications equipment.

Mobile District helped manage the timely completion of the challenging project which many people did not believe possible. Perhaps the Miami developer who said "it can't be done" read about the opening ceremony in October 1997.

Technical POC is luther.b.perry@sam.usace.army.mil PWD

Tim Dugan is a public affairs specialist at the Mobile District, (334) 690-2506, FAX: (334) 690-2516.

Real Property Inventory—essential to Army readiness

A critically important responsibility of DPWs is to ensure installations sustain an accurate and reliable Real Property Inventory. Why? The Real Property Inventory is a vital, decisionmaking document that is essential to Army readiness. The HQDA uses it as a baseline database to develop budgets, analyze stationing issues (including Base Realignment and Closure), analyze lease reduction, develop infrastructure reduction, and define real property excesses and shortfalls and the related justification for Military Construction. The ACSIM uses it to develop the Program Objective Memorandum (POM). Further, the Real Property Inventory is a critical database used in conducting the Installation Status Report.

DPWs have been outstanding in helping to maintain accurate and reliable information for the over 222,000 different types of real property assets represented in the Army inventory. From September 1997 thorough March 1998, they have helped us (CPW?) reduce the number of errors in the inventory by over 29 percent!

You might ask, "What is an error?" CPW's Planning and Real Property Division performs extensive an Quality Assurance analysis on all the installation Real Property Inventory data submitted to us. We check for the following factors:

- Invalid UM1 data
- Invalid UM2 data
- Incorrect Category code (i.e., catcode xxx90)
- Missing UM1data
- Missing UM2 data UIC unassigned.
- Missing or Inconsistent Real Estate Grant information

An error (or inconsistency) exists when one of the above factors is present. When we discover an error, we don't just go ahead and modify it, but rather, we work with the MACOMs and installations to validate the information. This is important because the installation is ultimately responsible for the accuracy of the information provided.

DPW Real Property Management Teams should be proud of their tireless efforts to maintain this high level of accuracy. They especially need the DPWs' support for the 30 September update. The Army needs to continue improving the inventory accuracy, so please:

- Focus on filling in the Missing UM1 and UM2 data.
- Make sure you have all your Real Property assets have an UIC assigned to them.
- Make sure your lease data are reflected in the IFS/RP module.

Keep up the good work and prepare for the September update!

POC is Jerry Zekert, Chief, Planning and Real Property Division, (703) 428-6139 DSN 328. PWD

Corps announces major restructuring of Military Programs Directorate

by Penelope Schmitt

Washington D.C., *July 10*: In Town Hall meetings at Corps Headquarters today, MG Milt Hunter, Director of Military Programs, and Mr. William A. Brown, Sr., Deputy Director of Military Programs, announced major changes planned for parts of the Military Programs Directorate. Specifically involved are the Engineering and Construction Division and Center for Public Works (CPW). The USACE Environmental Restoration and Program Management Divisions will be addressed in reengineering efforts yet to come, Hunter said.

The current restructuring phase involves several major realignments:

- A Special Missions Office (SMO) will be established for classified missions, such as those performed now by Technical Review and Modernization Office and the Power Reliability Enhancement Program.
- Consolidate all design and construction policy into one organization.
- OSD has proposed that Air Force become the Medical Facilities executive agent. If this comes about, the Corps' Medical Facilities Office will collocate with that new office in San Antonio, Texas.
- The Center for Public Works will be disestablished over the next 15 months. In its place, the Corps will establish an Installation Support Division in Headquarters, U.S. Army Corps of Engineers (HQ USACE) and seven Public Works Service Centers at Division level.
- The Corps Reinvention Center function will be moved to HQ USACE as part of the Installation Support Division.

"We want to embed the Corps in the working Army," MG Hunter said. "We need to get closer to our customers." That is why, he said, the Corps is setting up seven Public Works Service Centers (PWSCs) to be located at places yet to be determined by the USACE Divisions. "These regional PWSCs will make it possible for our customers to be in closer touch, to have a cell of folks expert in Installation Business right at hand. It's all part of making the Corps more a One-Door organization for our customers," Hunter said.

He also acknowledged that the restructuring is in great part a budget and numbers-driven exercise. "The Corps is no exception to what is happening to all of DoD," Hunter said. "We are taking the hits just like everybody else."

Transition Office established

The Military Programs Restructuring Plan is complete in concept. The details of position and function moves have not yet been finally worked out. A Transition Office has been established at HQ USACE to answer questions, create a functional plan, and refine the time line. The office became functional on Monday, July 20, 1998.

Dan Duncan heads the office. Other staff members will include: Penny Schmitt, Olivia Henry, Steve Love, Wally Schnee, Jack Spittal, Ed Vogel, Ed Irish, and Ray Navidi.

The office will sponsor a Web Site to keep Military Programs staff members informed of progress in the restructuring and implementation.

Key contact points:
- Hotline: (202) 761-0257
- CPW Home Page
- Corps Military Programs Home Page

ISD, Public Works Service Centers to replace CPW

The boldest aspect of the Military Programs Reengineering effort is a major restructuring of the installation public works support mission.

Installation Support Division

In October, a provisional Installation Support Division (ISD) of about seven staff members will be set up at HQ USACE. Ultimately, this group will become an ISD of about 40 people who will carry on the full-spectrum of installation support policy-making and program management at HQ USACE.

The headquarters group will primarily address Planning, Business Systems (automated systems support) and Installation Support (DPW sustainment). The group will also provide program management for Energy Management, Utilities Privatization, Facilities and Housing Training.

"We will be working out the details over the next 30 to 45 days," MG Hunter said. The transition office and our Personnel folks have a lot of work ahead of them. We will keep you informed with accurate information as soon as we can." Hunter encouraged staff and customers to call the Transition Team with questions.

CPW transitional as ISC

The Center for Public Works will be renamed as of 1 October, 1998, becoming the Installation Support Center (ISC). With minor changes to missions and functions, the ISC will continue to carry on CPW missions until installation support and other functions are transferred to their final destinations within the Corps.

During the interim period, the Office of the Assistant Chief of Staff for Installation Management has committed to continue funding as in the past for such functions as IFS and other Real Property management systems. A transition to fully reimbursable status after a three-year period is now planned.

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PWSCs to stand up in '99

In January 1999, the Corps will stand up seven Public Works Service Centers (PWSCs). The Centers are projected to have a staff of eight each, and to be located within Corps Divisions, at sites yet to be chosen in coordination with Corps Division Commanders.

What will the PWSCs look like? They will have a charter to perform functions in support of DPWs. "We see this as a great force multiplier for the installation business," Bill Brown said. "We estimate—and we're told we're being too conservative—that these 56 people will be leverage equivalent to 168 people at the installations. We think we can annually save our installations in excess of $16 million. It's a good deal for the Army!"

How will this work? The plan is to make services available on a regional basis. "We think Planning and Design, RPMA Project Management, and RPMA Business Practices are the areas in which our customers, the DPWs, could get the most out of a regional service center," George Braun, Executive Director of CPW, said. "But our customers will play a big role in deciding what services a PWSC should ultimately provide."

Will the PWSCs DO all this work? "No!" Dan Duncan, head of the Transition Team, said. "They won't do it themselves; instead, they will serve as the focal point for these types of services to be performed in the region—they'll be that one door to the Corps we are looking for! They'll be finding the resources within the Corps or through Contracts, to get missions done."

PWSCs will offer:

- Master Planning Services
- RPMA Project Management
- RPMA Quality Assurance
- O&M Design
- Customer Communications
- Installation RPMA Data Management
- RPMA Business Practices PWD

This is the first in a series of articles designed to provide factual background information for Corps of Engineers military and civilian team members on the cost of USACE services to installations. As the outgoing Commander of Savannah District, Smith calls himself "a dedicated, and now enlightened, member of the Engineer Regiment." Future articles in this series will give more detailed coverage of issues like:

- *Rates and mark-ups—what are they and how do they work?*
- *Comparability between the Corps and civilian providers*
- *Using Activity Based Costing to learn your own true cost of doing business.*
- ***Other topics you request!***

A District Engineer takes on your Commanders' questions about Corps costs

by COL Grant M. Smith

During my three-year tour as District Engineer of Savannah District, executing one of the largest military construction programs in the Corps, I experienced a variety of reactions to the costs of Corps services as I provided engineering and technical services to our military customers. One of the main factors in customer reactions was the degree of knowledge and understanding about how districts are funded, how we operate, and how our costs can be compared to installation costs.

The reality is, it is virtually impossible to do an "apples to apples" comparison of USACE district costs with installation costs and budgets. Activity Based Costing (ABC) can come close. But without a mediating tool like ABC, it's hard for DPWs and their commanders to see any comparison between their own operations and a project-funded, total cost-based budgeting process that makes a district work.

This disconnect results in perceptions that are truly unhealthy for the engineer team!

The installations perceive the districts as "running in the money" and gouging military customers to pay for unneeded markups and overhead expenses.

The districts worry that installation engineers are trying to squeeze suffering from the districts, don't understand their processes, and as a result, fuel installation and garrison commanders' declarations that "the Corps costs too much!"

Here are some facts—seen from a district engineer's perspective—that can help installation and district engineers work better as a team, based on knowledge and understanding.

Corps districts are *project-funded* organizations. All income that comes into a district to fund labor comes from two principal sources: First, Planning and Design (P&D) money arrives as percentages for MILCON or flat fees for O&M. Second, and Construction Supervision and Administration (S&A) arrives as percentages for MILCON and O&M projects, special fees for other projects. All the time worked by Corps district team members, except for military officers' time, must be charged on an hourly basis, to either a project or to an overhead account.

Since no direct funding is received to cover any labor costs, Corps districts must charge hourly labor rates that are *totally burdened* with all the costs associated with government service employment. This is a method of charging for labor that is

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common in the private sector, but there is nothing like it on a military installation.

The burden that is placed on each hour of labor includes three major components:

- *The effective rate (for example, 1.48 or 48 percent).* This is a mandatory markup that covers the costs of retirement accounts, medical coverage, annual leave and other associated labor costs. This rate is the same across a Corps district. These costs are paid directly at DA level for civilian employees who work at installations.
- *The technical indirect (departmental overhead) rate (for example, 32 percent).* This is a mandatory markup that covers management overhead and other costs for each department in a district.

For example, the technical indirect rate charged by a district engineering division pays for administrative costs associated with operating that division, like the labor costs of the division chief, computer purchases, and the like. These rates differ among divisions in a district. These costs may or may not be identifiable as administrative costs in an installation organization.

- *The General supervision and Administration (G&A) rate (for example, 29 percent).* This, too, is a mandatory markup that covers management and administrative overhead at the district level, like the costs of the office of counsel, the resource management office, the executive office, and the like. This rate is the same for an entire district. These costs exist at an installation, but are usually not visible to installation offices that benefit from or use the services. For example, and installation public affairs office cost is visible at Garrison level, but not divided out as a burden that each using entity at the installation sees itself as paying for—it is direct funded at installation level.

When these rates are applied to labor charges for work done by a Corps district, it means that what might be a charge of $1.00 for an unburdened cost of labor in a non-project-funded organization like a DPW, becomes a charge of something like $2.40 per hour for the totally burdened cost of labor. Sounds outrageous to your commander? The fact is, these costs are comparable to the costs found in civilian industry, with the exception that Corps districts, as Army organizations, do not earn profits!

I strongly believe that a thorough understanding of this information, and how it really compares to installation costs, will lead to a better relationship among members of the whole engineer team.

As an outgoing district engineer, I can assure you that Corps districts are working hard to control costs and charges to customers. I can also tell you that the options a district engineer has to make dramatic cost cuts are as limited as yours! For example, a district engineer has no authority to waive charges of an effective rate or any of the other markups that constitute a fully-burdened labor rate.

District engineers can control travel costs, information management costs, efficiency and effectiveness. These controls can change the labor burden rates, but only on the margin.

The Chief of Engineers is absolutely committed to reducing costs, and we will continue to make progress. Corps district S&A costs have been reduced in the last three years by more than 15 percent. And we have done this with no reduction in the level of service you expect for construction administration and management.

Yet it's a fact that no matter what is achieved in our efforts, we will never achieve an unburdened labor charge. Over time, installations may find that their own costs of doing business become more visibly "burdened" with full costs as well. If we can work toward better understanding of costing throughout the engineer team, we can all work together to improve quality and efficiency in service to our installations.

With all the challenges that face us, we need to spend our time finding better ways to do business and ways to maximize the engineer capablities in support of installations.

Understanding our realities can help us to do that job even better. **PWD**

COL Grant M. Smith is currently Chief of Staff at the United States Military Academy at West Point, New York. He recently completed a three-year tour as Commander, Savannah District, U.S. Army Corps of Engineers.

Regional Business Centers

by Bernard Tate

There is a revolution in the U.S. Army Corps of Engineers, one of the most sweeping sea-changes in decades. It will change how the Corps does business (even how we *think* about doing business) for decades to come.

"The division business center is the concept of operating the districts in a region as a single business entity, overseen by a regional management board," said COL Donald R. Holzwarth, commander of Southwestern Division (SWD). ("Region" is the geographical area covered by the division.) "The old method, where each district operates as its own business entity, is the culture we grew up with. But by centralizing business planning at the division, we create an interdependence so that each district can draw on the resources of the other districts in their region to meet customer needs. You shift the focus of corporate business planning from the district to the division, but you still retain decentralized execution, the real strength of the Corps."

The need for the division business center (DBC) grew out of the restructuring and downsizing the Corps has undergone in the past few years.

"As a result of getting leaner and meaner, the districts aren't as robust in capabilities as they used to be," said Holzwarth. "Now we're looking at using the resources of the whole region to better meet the needs of our customers."

SWD got a head-start in working with the DBC concept.

"We have been building our regional operations environment for about two years," said Holzwarth. "Our Regional Management Board, originally called a Workload Resource Management Board, has been meeting for more than a year-and-a-half."

The regional management board (RMB) was part of SWD's long-range campaign plan to improve their business practices, but they quickly found they were thinking along the same lines as LTG Joe N. Ballard, Chief of Engineers. "We first briefed the Chief last November on what we then called 'operating the division as a profit center,' and he liked the idea and said keep moving down the track with it, so it became a test division project," said Holzwarth. "The Chief asked me to brief the Board of Directors (the Corps' division commanders and senior leadership) in February. We got some great coordination and input from the other divisions before the briefing. After the briefing, the Chief made the decision that all divisions would adopt the initiative and that we would standardize its name (Division Business Center), as well as the Regional Management Board."

The RMB is the key to the division business center operation. The board members from the division are the Director of Programs Management (PM), the Director of Engineering and Technical Services (DETS), and the Director of Resource Management (RM). District board members are the Deputy District Engineer for Project Management (DDEPM), and the RM. "In SWD, we stress including other key district technical leaders as valuable to the overall operation of the board," said Holzwarth. "This assures well-rounded corporate leadership for the region."

Holzswarth emphasized that the membership of the regional management board comes from *existing* resources. The districts do *not* lose any resources to the RMB, and the division does *not* gain any resources.

"The regional management board may meet physically at division headquarters, but it's important to define what it is, and what it is not," said Holzwarth. "What it *is*, is using the districts' and division's key leaders and key management structures in a regional mode, so that corporate business planning has been moved from the district to the division.

"What it is *not* is some big blob at the division where you have all the resources and you centrally execute everything," said Holzwarth. "The customer still deals with the district, and the district still does the work."

The "One Door to the Corps' idea is the easiest way to explain the DBC. The customer still approaches a district to do the work. But instead of having access to just that district's manpower and expertise, the customer has access to the entire division's manpower and expertise.

"When the PMS, DETS, DDEPMs, Chiefs of Enginering and Construction, and RMs get together, they wear a regional hat at that time," said Holzwarth. "So a person no longer represents Galveston District alone, he represents Galveston District *as part of* the SWD team. So if District X has work that's beyond its capabilities, the regional management board makes it possible

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for them to go to District Y for help. So now you're using the assets of the region. That's good for District X because they are delighting their customer, and it's good for District Y because they got to use their capabilities and put their people to work. The concept is not that we've got some scheme to distribute and balance workload. It's customer focused — share the resources and focus them with centralized planning on that customer.

"And that's a big change," Holzwarth continued. "The old paradigm is, 'Hey, this is my district. I'm only concerned about getting work for us and I don't care about anyone else.' Now we expect the district leaders and the PM to focus on what's best for his customers using regional resources versus just thinking of himself."

"The 'One Door to the Corps' can even extend nationwide. "National teamwork is the next logical step," said Holzwarth. "In fact, we've done some of that already. We just had our first general partnering session with South Pacific Division, our neighbor on one side, and we'll do the same in the near future with Mississippi Valley Division, our neighbor on the other." In fact, SWD's recent work with the Immigration and Naturalization Service has provided work for Los Angeles, Albuquerque, Galveston, and Fort Worth districts, with more possibilities for future work.

"Centralized corporate planning is just one key concept in using the regional management board," said Holzwarth. "Another is standard business practices. We had a task force create formats for operating budgets and for reporting to the RMB what their operating budget will be. Now districts will have to report to the other districts what they are charging, their expected income, and expected expenditures. Peer accountability is going to be another big part of this change."

All these changes will echo throughout the Corps well into the 21st century.

"We think this will lead to increased sharing of capabilities and resources, improved efficiency and effectiveness, and make charges to our customers more consistent and equitable," said Holzwarth. "In SWD, using the regional management board showed us that if you really want to change the Corps' culture, then change the way we do business.

"We attribute this idea to Terry Coomes, recently retired Chief of Engineering and Construction in Fort Worth District," said Holzwarth. "Terry, as part of the RMB, challenged us to do more than just talk about changing the culture, but instead get to the heart of how we do business. His original idea is what we developed into the division business center."

"As we prove ourselves, as we execute with excellence, there will be more work for all of us. As the pie gets bigger, everyone gets a bigger piece of pie."

—COL Donald R. Holzwarth

Of course, in a change of this magnitude, there are always bugs to be worked out.

"The Corps of Engineers Financial Management System was designed for independent districts," said Holzwarth. "We're realizing that the next logical evolution of CEFMS is financial *interdependence*. Right now, we transfer funds back and forth between our districts with Military Interdepartmental Purchase Requests, which is an antiquated process, very time-consuming. We're experimenting with somehow making CEFMS databases work together so that it's as easy to charge from one district to another as electronic banking."

CEFMS is not the only change planned for the near future. "All the divisions are looking at standardizing their budgeting and accounting practices," said Holzwarth. "They're providing guidance to their districts for the FY99 operating budget, looking at targets and limitations and how to measure them. They're trying to do it early so that the FY99 budget is planned well before FY99.

"Most divisions are just starting up their regional management boards, so during FY99 they'll learn how to operate them," said Holzwarth. "They'll start capitalizing on the best business practices. Districts will be automatically sharing their thinking with the other districts, so someone will say, 'Hey, that's a good idea. Why don't we do it across the division?' They'll regionalize and consolidate functions where it makes sense, expand the use of virtual teams, allocate funds based on regional priorities instead of district priorities. And we're all going to explore standardizing accounting practices like direct costs and overhead."

Despite all the talk about changing the Corps' culture and business practices, Holzwarth says that the division business center concept is actually customer-oriented. To the customer, all the regional and national interaction is mostly transparent. As far as he's concerned, all he did was approach his district for work and got what he wanted, on time and at a fair price.

"We talk a lot in SWD about delighting the customer," Holzwarth said. "I know it sounds a little silly, but delighted customers come back, and refer other people to us. Some district people fear that central business planning at the division means their district will get less work. That's not true. As we prove ourselves, as we execute with excellence, there will be more work for all of us. As the pie gets bigger, everyone gets a bigger piece of pie." PWD

Bernard Tate is the editor of the **Engineer Update** *at Headquarters.*

WE NEED YOUR HELP!
Don't forget to complete the Readership Survey on p.29 and mail it back to us. Your input is important!

"Building the team" to leverage the total Corps organization to our customers is a Corps vision element. The following stories are three examples of Corps virtual teams at work.

Virtual team completes DFAS project design

by Jennifer Wilson

The Corps of Engineers is using a new technique to accomplish an old goal— satisfying the customer.

The Corps is sharing work between districts to meet the needs of both military and civil customers. A recently completed project at Fort Sill is just one of the success stories.

The Defense Finance and Accounting Service (DFAS) went to the Tulsa District to design the Lawton-Fort Sill Operation Location Project. The project involves the renovation and remodeling of a 150,000-square-foot former hospital and clinic to a finance and accounting center.

Tulsa submitted the 30 percent design in 1995, but because of budgetary constraints, the project was put on hold. When the project was reprogrammed in early 1997, the district no longer had the necessary resources in house to update the design as needed. Because a contract design firm could not be procured in time to meet the submission deadline, Tulsa turned to its sister districts.

"Tulsa District had worked successfully as a team with Fort Worth District to complete a critical project at McAlester," said Tulsa District project manager Burl Ragland. "Earlier, we had worked closely with Little Rock District on several project at the Pine Bluff Arsenal, and we were performing joint designs with the Department of Public Works at Fort Sill. All these factors created a strong, positive team that believed this work could be divided, coordinated and successfully completed."

Tulsa District took on the technical management and project management responsibilities for a multi-district virtual team. Members included Tulsa, Fort Worth, and Little Rock districts as well as an A-E contractor and Fort Sill DPW. Fort Worth was responsible for structural, mechanical, civil design and fire protection. Little Rock handled the architectural design work. The A-E did electricial work and Fort Sill handled on-site support.

The team held work site meetings, developed a scope of work and updated the plan.

"At the review meeting for the concept plan, the team suggested to me that they wanted to complete the design," Ragland said. "I received comments from each member of the team, and from their managers that this project would be designed to provide a quality product and the design would be completed on time, within scope and within budget."

The team's decision also honored the customer's request to maintain a consistent design team through the life of the project.

The completed 30-percent design was submitted for review in May. Tulsa District performed an independent technical review of the work using in-house labor, and a biddability, constructability and operability review using resident office staff.

Local and national DFAS staffs also reviewed the design carefully. As anticipated, the user made a number of concept-level functional comments and corrections. The level of detail, technical adequacy and comprehensiveness of the design submittal, however, was deemed outstanding.

The review also revealed that the total design effort was actually about 50 percent complete, so future design time was reduced by four weeks. The team delivered project design documents two months ahead of the original schedule!

Members of this Corps virtual team for design went out of their way at every turn to guarantee their customer the best possible service. The team's commitment reflects a recognition that Corps of Engineer designers and technical personnel work in a competitive environment where reinvention and a change in culture are essential for their continued professional growth and service to the Army.

"The team produced a set of quality plans and specifications that received flattering comments after the 95 percent design review from all levels of the customer's organization," Ragland said. "There was an obvious level of personnel pride and satisfaction from each member of the design team."

Customers are convinced by results, and the recent submittal has helped convince the customer of the benefits of the virtual team method.

The project is now being advertised. Construction should be completed in late 1999.

POC is Burl Ragland, (918) 669-7231. PWD

Jennifer Wilson is a Public Affairs Specialist at the Little Rock District.

Corps team helps Air Force TLF project take off

by Vince Elias

An Air Force requirement to construct and fix Temporary Lodging Facilities (TLFs) worldwide is moving efficiently at full speed, thanks to an Army Corps of Engineers team composed of several Corps districts around the world. New York District serves as the Air Force's "One door to the Corps" for this high priority effort.

TLFs are hotel-like accommodations on military bases for military members and their families to stay while in a transient status. Families are authorized to remain up to 30 days while awaiting permanent housing.

Under this $100 million program, new lodgings will be built at 12 military installations and upgraded at four others.

TLFs offer the advantage of low cost temporary accommodations, with conveniences not found in most off-base lodging, and are located near key personnel processing and service centers. "The TLFs are a great place where military members and their families, of all services and all ranks, are able to enjoy quality, affordable temporary lodging," said Mike Wilson of the Headquarters, U.S. Air Force Services Agency. "Our airmen, women and soldiers used to be required to rent off-base hotel rooms using temporary lodging allowance funding or staying in the barracks."

Stella Marco, New York District's TLF Program Manager, said, "The Air Force came to the Army Corps because they wanted one source to manage their program and because they held our project management, design, and construction management expertise in very high regard."

In the partnership, both organizations are mutually committed to improving the quality of life for military families in transit by providing modern, functional and well-equipped Temporary Lodging Facilities. "These efforts correlate to the existing commitment between two agencies to build the world's most respected Air and Space Force," said Major Chris Guevin, who works for the Air Force Civil Engineer.

Several agencies are participating in the big project: The U.S. Air Force Services Agency (customer), San Antonio, Texas; Headquarters, U.S. Air Force Services (policy, program manager); Headquarters, U.S. Air Force, Civil Engineering (construction program manager) Washington D.C.; U.S. Air Force Major Air Commands responsible for each installation; local base personnel; several Army Corps Divisions and Districts; Historical Commissions; Foreign Governments; and the Army Corps' Value Engineering Team from Savannah District.

Robert Gerrits is New York District's Design Team Leader for the program. Together with enginering technical managers Liliana Jutting, Matthew Snellgrove and Timothy Lee, the design team worked long hours, producing project designs which met tough standards.

"Whether Los Angeles District is doing the construction management for Davis-Monthan, or Savannah District doing it for Robins Air Force Base, it is not a concern. The Air Force wanted one engineering organization to execute the program, and they selected the U.S. Army Corps of Engineers," said Gerrits.

A lot was accomplished in one year, and success came from a carefully-sculpted plan coordinated with the customer in keeping with the Corps Plus strategy.

New construction began at four bases in February 1998, and construction awards were received for additional projects (Corps District in parentheses) at Robins Air Force Base, Georgia, and Seymour-Johnson Air Force Base, North Carolina (both Savannah District), U.S. Air Force Academy, Colorado (Omaha District), Bolling Air Force Base, Washington D.C. (Baltimore District), and Ramstein Air Force Base, Germany (Europe District). Construction bids were opened at Hickam AFB, Hawaii (Hawaii District) and Moody AFB, Georgia (Savannah District). Projects in design include Elmendorf AFB, Alaska (repairs) (Alaska District), Keesler AFB, Mississippi

(Mobile District), and Altus AFB, Oklahoma (Tulsa District). On hold is one project at Patrick AFB, Florida (Mobile District). Renovation projects were advertised in Landstuhl, Germany (Europe District) and Kadena AFB, Japan (Japan District).

The Air Force's goal is to develop a standard design, thus allowing service members and their families traveling from base-to-base to walk into familiar surroundings. But even though the floor plans at all bases are identical, each facility has its own interior decorating scheme. Each base selects furnishings, decor, wall colors, and interior decoration fixtures from three available design schemes.

Overseas lodgings, such as in Ramstein Air Base, Germany, employ a central design concept with the final detailed design accomplished by local architectural and engineering firms to ensure compliance with their local building codes.

To ensure full and open competition, concurrent bid opening processes occur at both New York District and the geographic Corps districts. The construction contract awards are made by New York District, and then transferred to each geographic district for construction management as well as contracting officer authority. Project schedules, costs, and status are then overseen by New York. For locations abroad, the geographic district also manages the design, and advertises, and awards the local construction contract for new construction. Since standard designs are not used for repair projects, each geographic district oversees its repair project, that includes design management, advertising and award.

POC is Vince Elias, (212) 264-9114. PWD

Vince Elias is a Public Affairs Specialist at the New York District.

Corps helps Fort Stewart rebuild after storm

by Linda S. James

The storm had cut a path through the middle of the Georgia Army post near Savannah killing one soldier, injuring several more and doing about $15 million in damage to 60 buildings.

When Fort Stewart, Georgia, suffered severe damage at the hands of an early morning tornado in April, the Corps of Engineers was called in to help the installation begin the arduous process of cleaning up, repairing, and rebuilding what had been nearly destroyed. Not one but two Corps organizations joined ranks to provide the help Fort Stewart needed when they needed it most.

According to Charles Ford, of the Huntsville Center Programs and Project Management Directorate, the effort to help Fort Stewart was a text-book case of Corps teamwork, a perfect example of the "One-Door to the Corps" philosophy at work.

"The call for help went to Savannah District and it was clear that quick response was critical to Fort Stewart," said Ford. "Savannah called as a result of a briefing conducted just hours before the tornado by two members of the Huntsville Project Management team— Joe Lofton and Tahir Rizvi. This briefing described the various O&M (OMEE) tools we had at our disposal," he explained. "Because of this briefing they knew that Huntsville had a contracting mechanism in place that would allow the Corps to quickly respond to Fort Stewart's needs."

The storm had cut a path through the middle of the Georgia Army post near Savannah killing one soldier, injuring several more and doing about $15 million in damage to 60 buildings.

Ford explained that many of the severely damaged buildings provided housing and support services to the installation's soldiers. A fire station, numerous motorpools, company administration facility, general administration facility, physical training center, the central heating plant and above ground sewer lines were among the casualties from the powerful springtime storm.

To respond to the devastation at Fort Stewart, Savannah District and Huntsville Center made the project a priority, and, the effort showed.

"It was an amazing thing to see," he said. "Everyone wanted to ➤

The tornado hit at dawn. Damage assessment teams from Savannah District were at Fort Stewart that same morning, providing the initial analysis of the damage and the cost estimates for repair.

make it work. Savannah District, the Fort Stewart Directorate of Public Works, Forces Command, the Corps area engineer— each was determined to help Fort Stewart dig out of the destruction."

That "determination" and a special contracting process made it possible to respond so quickly to Fort Stewart, said Ford.

The tornado hit at dawn Thursday. Damage assessment teams from Savannah District were at Fort Stewart before 10 that same morning, providing the initial analysis of the damage and the cost estimates for repair. "Huntsville Center was on the ground at Fort Stewart on Tuesday," he said. "Savannah District met with the installation DPW and us on Tuesday to establish a strategy; the contractor arrived on Wednesday afternoon to assess the resource requirements; and repairs began Friday."

Ford added that one of the reasons things went so quickly and smoothly was the fact that Savannah District has an Installation Support Manager, Brent Rose, who actually sits in the Fort Stewart DPW office. "That link was invaluable to this whole effort," stressed Ford. "It boiled down to having the right Corps people and the right process to make it happen."

The contracting process used at Huntsville Center is an indefinite delivery-type contract. Ford explained that these contracts are typically used for medical facilities repair and renewal but can be used up to a certain dollar limit on projects other than medical. Huntsville Center currently has four of these indefinite delivery-type contracts in place that cover the continental United States, Alaska, Hawaii and our possessions. Ford explained that this contracting process eliminates the long lead times generally required to contract for work with a traditional method. These contractors can be called up on a moment's notice and respond quickly.

According to Ford, it was just by chance that Huntsville Center had visited Savannah District the week before to brief them on this specialized facilities contracting process. "Savannah has a process similar to ours that they use for civil works projects, but it couldn't be used on a military installation," explained Ford. "They called us because they thought our contract would meet Fort Stewart's needs, and it did."

The Huntsville Center project manager is no longer on-site facilitating work under this contract. All additional development of scopes of work, preparation of government estimates are being handled by the Fort Stewart Resident Office, with the task orders being processed in Huntsville. The team at Fort Stewart is working directly with the contract specialists at Huntsville. The Huntsville Center contract specialist, Savannah's installation support manager, and the contractor are conducting negotiations for each project via telephone. This streamlined approach allows Huntsville Center to award firm fixed price task orders to the contractor in a matter of days.

The repair work at Fort Stewart is expected to take from 6 months to a year. PWD

Fort Stewart Tornado Recovery Team

Savannah District

Pete Oddi
Bill Plunkett
Anne delaSierra
Joseph King
Brent Rose
Kesh Vadlamani
Bill Sillers
Stacey Aaron
John Roberts
Duncan Vaughn
Edward Krolikowski
Hal Thomas
Walt Hohne
Jeb Taylor
Ronnie Moody
William Sillers
Kathren Santikos
Steve Turner
Warren T. Clarke
Butch Usher
Robert Harvey
Gary Close

Huntsville Center

Tahir Rizvi
Michael Stahl
Donna Bliss
Sidney Motte
Richard Suever
J. R. Larkin

Fort Stewart DPW

Vic Maulden
John Baker

Buying boiler/cooling water treatment chemicals: GSA or not

by Nelson Labbé

Chemicals are used successfully for scale and corrosion control in boilers systems, cooling towers and chilled water systems. However, it can be difficult to select and buy the right chemicals at a good price. There are two routes to buying chemicals for boiler and cooling water treatment. One is to buy them using GSA schedules; the other is to set up your own contract to purchase chemicals. Each route has pros and cons.

GSA has established a number of different Federal Supply Schedules (FSS) for different types of products. The schedules list vendors who agree to provide products to GSA customers at "most favored customer" discount prices. The FSS for boiler/cooling water treatment chemicals is numbered as FSC Group 68, Part V, Sections B and C, FSC class 6810, 6850. Price lists for chemicals are available directly from the vendors. If the order is under $2,500, it can be placed directly with the vendor. For orders above $2,500, a "best value" determination must be made after reviewing schedule price lists from at least three vendors.

This is the difficult part of using the GSA price lists. The price lists do not identify the active components in each product or the concentration of the active components. To obtain the correct mix of components to protect your boiler or cooling system, you must request and rely on a proposal from the vendor listing the products they recommended for your system.

Unfortunately, comparison of prices to determine best value is made difficult because the vendors do not supply information on the active chemicals or the concentration of active chemicals in each of their products. In other words, it is not possible to tell whether you are paying for a product that is 90 percent active chemical and 10 percent water or 1 percent active chemical and 99 percent water.

Vendors also include the cost of services such as monthly vendor site visits in their cost for chemicals. Because of added services, the cost of chemicals from these vendors can range from 5 to 20 times the cost of generic chemicals. Considering the difficulty in comparing product prices and the variability of services from different vendors, the lowest price product from the price lists does not necessarily mean best value.

You do not have to buy from the vendor with the lowest listed prices. The best value is determined by the quality of the products and the quantity and quality of services provided. If you have any comments about a specific vendor on the GSA list, please contact GSA at 253-931-7898. Once a "best value" vendor is selected, GSA recommends a blanket purchase agreement (BPA) be set up for a year or two to fill a recurring requirement.

Setting up your own contract to purchase treatment chemicals can be time consuming initially, but often provides the most economical purchase vehicle. It is initially time consuming, because the contract must list the chemicals to be supplied by the vendor and state whether any vendor treatment services are to be included with the chemicals. If treatment services are included, they must be specified, including control levels for each treatment chemical, composition of the makeup water, frequency of plant visits, training for operators, supplying test kits, control of feed pumps, softener evaluations, corrosion testers and any other assistance. The advantages are that you get exactly what you need and the evaluation of prices from different vendors is straightforward.

In summary, the advantages of using GSA Federal Supply Schedules are it is less time consuming, GSA lists offer discount prices, and there is a large number of vendors to choose from. The disadvantages are:

- It is almost impossible to compare products or prices from different vendors.
- You must enlist the vendor to determine specific products to use.
- Vendors may want to provide chemicals different from those that operators are familiar with.
- Different vendors offer different levels of service for the same price.
- Cost of added services means that chemical costs range from 5 to 20 times that of generic chemicals.

Generally, DPWs more interested in services buy chemicals from the GSA schedule.

The advantages of writing your own contract are that you will get exactly the chemicals you want, you can specify what types of services are to be provided, you will obtain competitive low prices, evaluation of vendors/price is easier, overall cost for chemicals will be lower and once the contract is written, and it can be used over and over. The disadvantages are that it is time consuming to set up correctly and include all of the required details in the contract.

No matter from whom or how your installation purchases treatment chemicals, it is always important to have quality assurance to check that the chemicals are being controlled correctly and the vendor is providing appropriate chemicals and service, if any.

For assistance in setting up contracts or reviewing vendor proposals, conducting vendor evaluations, or setting up quality assurance for boiler water and cooling water treatment, please contact Nelson Labbé at (703) 806-5202 or Cris Sawyer at (703) 806-5206 DSN 656.

A recent Public Works Technical Bulletin, PWTB 420-49-05, provides additional information on chemicals and procedures for boiler and cooling water treatment. Please contact Nelson Labbé or Cris Sawyer for copies. PWD

Nelson Labbé works on water treatment issues in the Sanitary and Chemical Division of CPW's Engineering Directorate.

Bridge advances recycled plastic lumber market

by Dana Finney

The new plastic bridge blends aesthetically with the surroundings.

A new recycled plastic bridge at Fort Leonard Wood attests to greatly expanded potential for recovering a solid waste in the U.S. while providing an alternative to wood construction. Completed in June, the bridge spans a creek on the Missouri Army post's Gammon Field and represents a reuse of some 13,000 pounds of waste plastic that had been otherwise destined for a landfill.

"This construction is significant in that, while larger sized structures have been built using recycled plastic lumber, no other known structure has the structural capacity of this bridge," said Richard Lampo, researcher at the U.S. Army Construction Engineering Research Laboratories (CERL), which led the project to build the bridge.

The recycled plastic bridge replaces an older wooden bridge at Fort Leonard Wood. The 25-foot-long by 26-1/2-foot-wide structure sits on six steel beams that had supported the original bridge. It is designed to bear loads up to light vehicles. "I drove my half-ton pickup over it," said Stan Martin, civil engineering technician in Fort Leonard Wood's Directorate of Public Works (DPW). "The bridge looks great. It just looks like a painted wooden bridge until you get up close and see that it's plastic."

The bridge was built with donated materials under a joint project involving CERL, the U.S. Environmental Protection Agency (EPA), and Fort Leonard Wood's DPW. Battelle Laboratories and the Plastic Lumber Trade Association, Ohio, also participated.

M.G. McLaren Consulting Engineers, New York, designed the bridge using a protocol they developed for recycled plastics in coordination with the American Society for Testing and Materials and PLTA. The safe capacity of the new bridge is 100 pounds per square foot, or more than 30 tons over the entire structure.

Over 8.4 billion pounds of plastic containers are produced each year in the U.S., with some 6 billion pounds landfilled as waste. Recognizing the environmental and potential economic benefits of reusing some of the waste plastic, several entrepreneurs started making plastic lumber and timber products. But unstable market demands for plastic lumber led to the failure of many start-up companies.

CERL has been working since the early 1990s with Rutgers University, EPA, and a group of plastic lumber manufacturers to improve product quality and develop standards and specifications for the materials. CERL's interest was to infuse this environmentally friendly technology into the Corps' military and civil works construction. At the same time, EPA had announced a national goal to recover 35 percent of municipal solid waste.

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A worker cleans steel stringers which comprised part of the old bridge.

Recycled plastic lumber offers a replacement for wood products, many of which are treated with chemicals (CCA and creosote) to resist rot and insect attack. Chemically treated wood requires special handling and disposal, and chemicals can leach into the environment. Wood structures that are not treated with chemicals have to be maintained periodically by coating with preservatives that release organic volatiles into the atmosphere. Plastic lumber requires no such maintenance.

"We have wooden bridges and they're a maintenance problem," said Martin. "We have to send crews out two or three times a year to replace deteriorated lumber and fasteners that have worked loose. Most of our wood bridges are on running or hiking paths, so the splinters and loose fasteners become a safety hazard."

Martin estimates that bridges made with CCA-treated wood last about 15 years under the climate and usage frequency at Fort Wood. Untreated wood bridges may have to be replaced as often as every 5 years. In contrast, CERL's Lampo projects a 50-year, maintenance-free service life for the recycled plastic lumber bridge (steel supports may need repainting).

CERL and Fort Wood's DPW will continue to monitor the bridge's performance. By successfully demonstrating recycled plastic lumber in a large-scale, structural application, the project opens up a world of potential for diverting waste plastics to beneficial use — and the supply of raw materials is virtually limitless.

"It would take 87 miles of a bridge the same width as this one to use up just one year's landfilled plastics," Lampo said, or the equivalent of 462,500 bridges sized like the one on Gammon Field. "We're not going to run out of raw materials any time soon."

POC is Richard Lampo, Facilities Technology Laboratory, CERL, (217) 373-6765. PWD

Dana Finney is the Chief of the Public Affairs Office at CERL.

The recycled plastic bridge can support a total load up to 30 tons.

MEK still subject to toxics reporting

The Environmental Protection Agency (EPA) has recently denied a petition to remove methyl ethyl ketone (MEK) from the Toxics Release Inventory (TRI) requirements. MEK is one of the most commonly used organic solvents in DOD and accounts for a significant amount of the releases reported to the National TRI under Section 313 of the Emergency Planning and Community Right to Know Act (EPCRA) of 1986. Federal facilities were required to comply with EPCRA by Executive Order 12856.

MEK contributes, as a volatile organic compound (VOC), to ground level ozone, or "smog." Substitutes for MEK are being investigated. For more information on this research, contact Tom McCarley, DOD HTIS, located at DSCR in Richmond, Virginia, at DSN 695-5609 or E-mail tmccarley@dscr.dla.mil.

In the meantime, the DLA Environmental Products (EP) catalog lists 25 products as possible alternatives to MEK. Make sure you check with the process owner, engineering support activity or other technical authority before substituting any environmental product for a specified hazardous material. DLA's EP catalog is available in print and CD-ROM versions from DSCR Customer and Weapon Systems Support. To obtain a copy, please call DSN 695-5698 or (800) 345-6333. The catalog is also available on DSCR's web site at www.dscr.dla.mil

For more information on DSCR's environmental products program, please call Stephen Perez, DSCR Customer & Weapon Systems Support office, at (804) 279-6054 or e-mail: sperez@dscr.dla.mil

POC for MEK alternatives is Clifford Myers, (804) 279-3995, e-mail: cmyers@dscr.dla.mil PWD

Fort Lewis' hazardous waste management program sets standard

by Gary Stedman

Under current Army regulatory guidance, hazardous waste (HW) disposal is to be performed by the soldiers and units that generate the waste. This approach, however, results in a bureaucratic, multi-step HW disposal system, causing a high level of customer frustration, that can lead to illegal disposal (dumping) of the hazardous substances.

To insure compliance with HW laws and regulations, a unique HW management approach was developed at Fort Lewis, which provides a simplified disposal mechanism for the soldier, tighter controls on the generation of HW, and increased education and command emphasis on the HW program.

The One-Stop Program was created as a pollution prevention initiative within the Environmental Services Section, Environmental and Natural Resources Division of Public Works. The goal is to reduce soldier requirements and increase environmental compliance.

"We manage our resources to minimize our waste," said Ken Smith, chief of the Environmental Services Section. "This management takes many forms including education."

The One-Stop Environmental Services Section provides a centralized location to address or refer all questions concerning environmental compliance and protection of Fort Lewis resources. Environmental awareness training is provided on a weekly basis to soldiers and civilians through outreach programs. This includes officer and noncommissioned officer professional development classes and other specialized training.

"Our regulators really like our education and training program," Smith said. Education is the absolute key to resource recovery. Soldiers must learn to segregate, or materials become waste."

To facilitate the program, unit commanders and activity managers must assign an environmental compliance officer and a hazardous waste technician to attend a two-phase environmental compliance training (eight hours) program provided by the One-Stop Section.

The One-Stop Section handled more than 3,849 containers with more than 1,906 different waste streams during Fiscal Year 1997, with less than one percent error in waste identification.

Waste disposal is accomplished through several avenues. The Defense Reutilization and Marketing Office handles 80 percent of our standard waste streams through an on-site interim storage facility (less than 90 days) at the Logistics Center. Our One-Stop technicians pick up the waste from the generating activity and deliver it to the DRMO.

The other 20 percent are managed through direct vendor pickup. We deal directly with disposal contractors when it serves the best interest of the facility (for example, lead acid battery, solvent or antifreeze recycling).

Fort Lewis used to conduct semi-annual HW compliance inspections of the generating units and activities. The Environmental Services Section now prepares an Environmental Operating Certificate for each military unit and civilian organization having mission activities governed by one or more environmental regulations. This certificate is an "environmental permit" for the specific organization that provides a unit-specific, "one-stop" environmental compliance packet of essential information, requirements, and guidance.

The assistance provided goes beyond the gates of Fort Lewis. "Our technicians have provided planning information to deploying units throughout the world," Smith said. "We currently have video training packages available on the National Training Center and points of contact at other installations that can help units maintain the highest state of compliance with other state or host-nation environmental rules.

"The focus of our program begins with customer service, compliance and then evolves toward pollution prevention and resource management," Smith added. "Some of our well-known services include used oil sales, fuel sales, antifreeze recycling and household hazardous waste collection. Our newest fuel recovery program has resulted in virtual elimination of waste-fuel disposal at Fort Lewis."

"We average between 90 and 120 substance spills each year," Smith said. "A spill is defined as any loss of hazardous substance to the environment."

This additional duty requires technical knowledge of all hazardous substances within the Fort Lewis boundaries. They must also respond to some unusual hazards which require the ability to address hazardous materials such as methamphetamine labs, train derailments, aircraft crashes, traffic accidents and boat sinkings or other water-related releases.

Fort Lewis' One Stop Section, now located with the Pollution Prevention (P2) Program manager and staff, also allows integration of pollution prevention initiatives. Recently, One Stop and P2 developed a contaminated waste fuel-recycling program. For years, the management of contaminated fuel involved the collecting of thousands of gallons of contaminated fuel in drums and sending it off-post as a hazardous waste. Today they collect and store contaminated fuel on-post in bulk tanks.

"We pay industrial contractors for the technology service that recycles the fuel (removing water, the most common contaminate)," Smith said. "The U.S. Army Petroleum Laboratory then analyzes the recovered fuel, and if it meets technical specifications, it is donated, free of charge, to units for use in tracked armored vehicle. In 1997, 50,000 gallons of fuel were recycled and donated to units."

"The payback for this program is 1.17 years with an estimated net present

Coordination is key to Europe District's Enviropartnership Program

by Marnah Woken

Early customer involvement, thorough reviews, well defined scopes, and frequent coordination with partners are all part of Europe District's Enviropartnership efforts with their German counterparts.

The seeds of the partnership originally derived from a German-American Partnering session between Europe District and the Staatsbauamts, or German government construction contracting offices. The three main goals established for the program are: to mutually assist in USAREUR's environmental program execution, improve the environmental project execution process, and improve interagency working relationships.

"Enviropartnership involves working with our partners in the German Staatsbauamts to find better ways of executing environmental projects," said Mary Schommer, Europe District's Chief of the Ansbach Environmental Branch. "None of the methods we are using is new or revolutionary. We're primarily trying to do a better job on the basics."

"For example, we used to write very nebulous scopes of work. Now, we're trying to be much more defined and specific in our description of work so the bauamts can quickly see what is required."

Along with having a well defined scope, getting the projects to run more efficiently and smoothly means getting the customer involved in the review process, according to Schommer.

"We make sure the customer is involved and everyone is fully aware of what the needs and restrictions are on the project," she said. "We have reviews at every stage and involve everyone who is part of the program in the process."

"I think the biggest thing we're trying to make everyone understand is that there is a limited amount of money available. There is a responsibility with the bauamts and the contractors to design as efficiently as they can and recognize these cost constraints."

"I think we're doing a much better job with that as we continue to talk with the bauamts," added Schommer. "Given an understanding of the requirements through improved coordination, both the bauamts and the contractors are looking for ways to save money— from changing the design to using different materials without compromising quality."

Enviropartnership also involves a close working relationship with U.S. Army, Europe, according to Schommer.

"USAREUR has done some things to improve the execution process," she said. "They now have a technical expert, Dr. Kurt Preston, who reviews all remediation projects at various stages— from study and design— to design and construction. As a result of that, the bauamts are seeing more of USAREUR's presence in the environmental restoration projects."

One of Europe District's Enviropartnership successes is the Bamberg Landfill Project. The Bamberg Landfill ceased operations in the late 1980s. The Bamberg community did some things to close the landfill; however, concerns by local German water authorities over potential contamination from the landfills caused the community to request additional assistance from Europe District, said Schommer. "The first study conducted on the landfill through the Staatsbauamt proposed an extremely high cost for the final closure efforts."

"We worked with the bauamt, the contractor, the customer, the Area Support Group, the Base Support Battalion, and USAREUR Headquarters on the project which was the ultimate in partnership. Anyone who had anything to do with the project attended every meeting. With the give and take of all of these agencies, we were able to develop a project that fulfilled the concerns and requirements of the German government."

Schommer added the Enviropartnership processes are constantly being refined as everyone works together. "We continue to work on the processes," she said. "We continue to better define and coordinate all aspects of our projects so they run as smoothly as possible." PWD

Marnah Woken is a public affairs specialist in the Europe District Public Affairs Office.

(continued from previous page)

worth of $926,264, and this technology is transferable to any site," said Cindy Trout, P2 program manager. "Fort Lewis is currently the only installation in DOD using this technology to recycle contaminated fuel."

POC is Ken Smith, Environmental Services Section, (253) 967-4786. PWD

Gary Stedman is the Chief, Natural Resources Branch, ENRD, at Fort Lewis, Washington.

Japan District team works with Misawa to assess natural resources

by Michael D. Noah

Over the past decade, U.S. natural resource managers have shifted their conservation management focus from the protection of a single-species to protecting entire plant and animal communities. While the Department of Defense Environmental Conservation Program fully implements this ecosystem management policy on its lands and waters, the program does not apply to overseas installations. However, overseas installations must implement practices designed to protect the environment by using generally accepted environmental standards for similar installations, facilities, and operations in the U.S.

In the 53 years since the end of World War II, Japan has emerged from a mostly agrarian society to one of the most industrialized nations on earth. This change has come at the expense of its natural resources. The natural resources that once thrived on developable lands have now all but vanished.

In many cases, some of the last vestiges of these habitats are under U.S. stewardship. For example, one can quickly identify Camp Zama, Sagami Depot, and other U.S. installations on the Kanto Plain (Tokyo) in aerial photographs, since they comprise the few "green" areas in a "sea of development."

In other areas, such as Misawa Air Base, some of the largest contiguous expanses of unique natural habitat are found on U.S. installations. In 1997, the base's 35th Civil Engineering Squadron's Environmental Quality Flight asked the Japan District to conduct a biodiversity study and assessment of its natural resources to help them develop a Natural Resource Management Plan.

The Misawa biodiversity study will include more than just an inventory of the floral and wildlife— it will classify the vegetation and landscape analyses. The goal is to provide the installation with a baseline of not only its own natural resources but also those in the larger region in which they exist.

Since extensive field surveys of the various habitats would be both costly and impracticable, the District's team of Stephen Stuart, Yoshimi Shibata and Michael Noah developed an innovative sampling program. Cooperating with several U.S. and Japanese agencies, they're using state-of-the-science remote sensing technology, thematic maps and digital elevation data to classify the vegetation. The team is also surveying the percentage of ground cover and dominant vegetation. Further spatial statistical analysis of the data will help spot patterns of habitat loss or change within the region.

The team's end result will enable Misawa Air Base to develop and implement the actions necessary to conserve the natural resources under its stewardship. PWD

Michael D. Noah is an ecologist with the Japan District.

New entries in DLA Environmental Products catalog

The upcoming FY99 DLA Environmental Products catalog will contain some new products of interest to many of DLA's customers worldwide. Battery desulfators, remanufactured ink jet printer cartridges and new spill control products are among the new entries.

Battery desulfators join the existing rechargeable batteries listed in the EP catalog to create a new product category called Rechargeable Batteries and Battery Accessories. Batteries are considered the second most difficult and expensive item to dispose of, after tires. Desulfators can extend lead acid battery life, reduce the volume and cost of battery disposal and re-energize "dead" batteries that were disabled due to sulfation. The desulfators are solar-powered which increases their environmental preferability even more.

Chief of Staff of the Army GEN Dennis J. Reimer has directed the Army to reduce battery procurement by 50 percent by FY03 and, wherever possible, to use rechargeable batteries for all Army training. These products will help customers meet those goals.

Remanufactured ink jet printer cartridges join the popular remanufactured laser printer toner cartridges this year. Initially, these ink jet cartridges will be purchased by the manufacturer's part number but will eventually transition to a DSCR Purchase Description or commercial item description.

Oil spill control products made to A-A-1280 and A-A-1282 will be included under Spill Control Products in the next EP catalog. These oil sorbents are designed primarily for aquatic use and come in various sizes and shapes. The commercial item descriptions require certain levels of buoyancy, maximum water absorption limits and also state that the items must be non-polluting and non-toxic to aquatic life.

POC for desulfators and reusable batteries is Victor Poltrick, (804) 279-5536, e-mail: vpoltrick@dscr.dla.mil; POC for remanufactured ink jet printer cartridges is Clifford Myers, (804) 279-3995, e-mail: cmyers@dscr.dla.mil; and POC for spill control products is Mike Timms, (804) 279-5529, e-mail: mtimms@dscr.dla.mil PWD

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1	2	3	4	5

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High				Low
1	2	3	4	5

13. How important are stories on each of the following subjects? Would you like to see more or fewer of each type?

a. Installation Management

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

b. Corps Support

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

c. Facilities Engineering

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

d. Environment

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

e. Energy

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

FOLD HERE

f. Professional Development and Training

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

g. Automation

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

j. New technologies

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

k. Installation good ideas/lessons learned

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

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14. What topics would you like to see addressed in the *Digest*?
    _____
    _____

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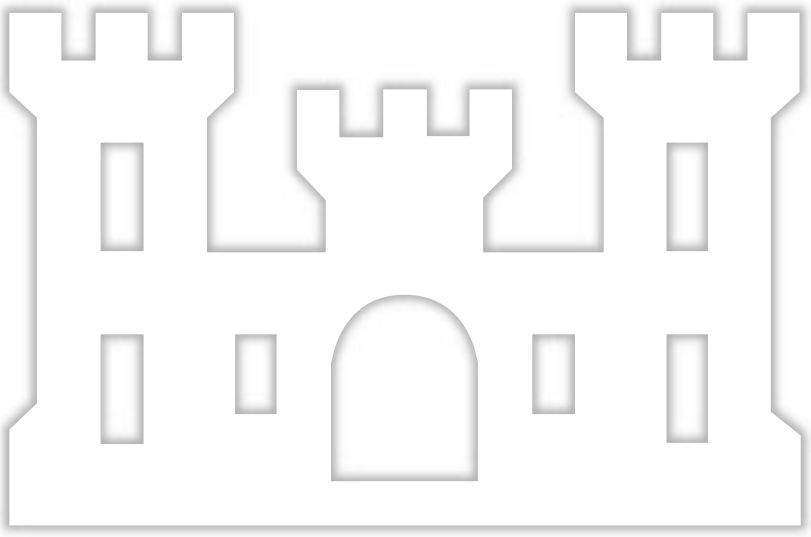

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